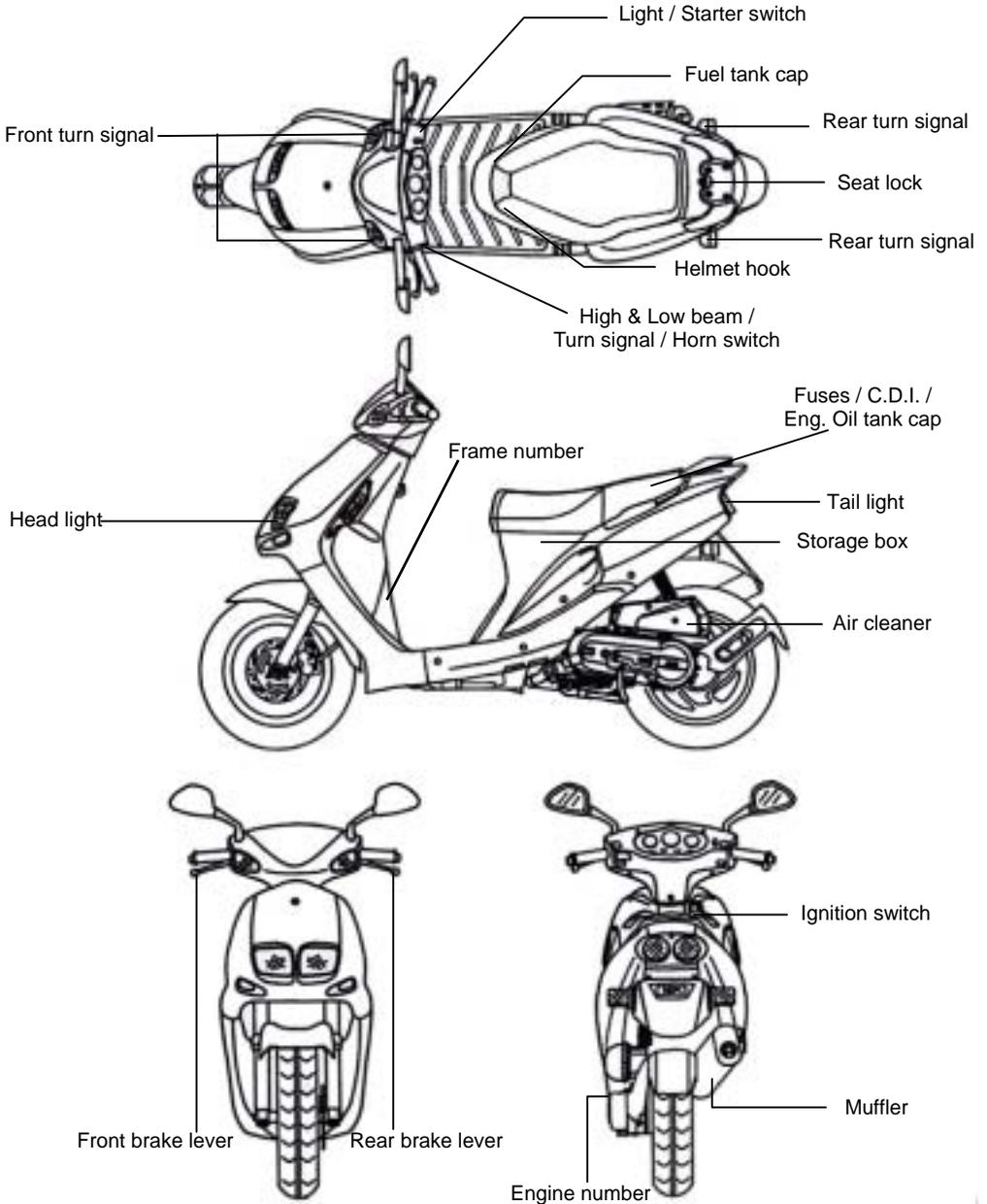


Content/ Subject

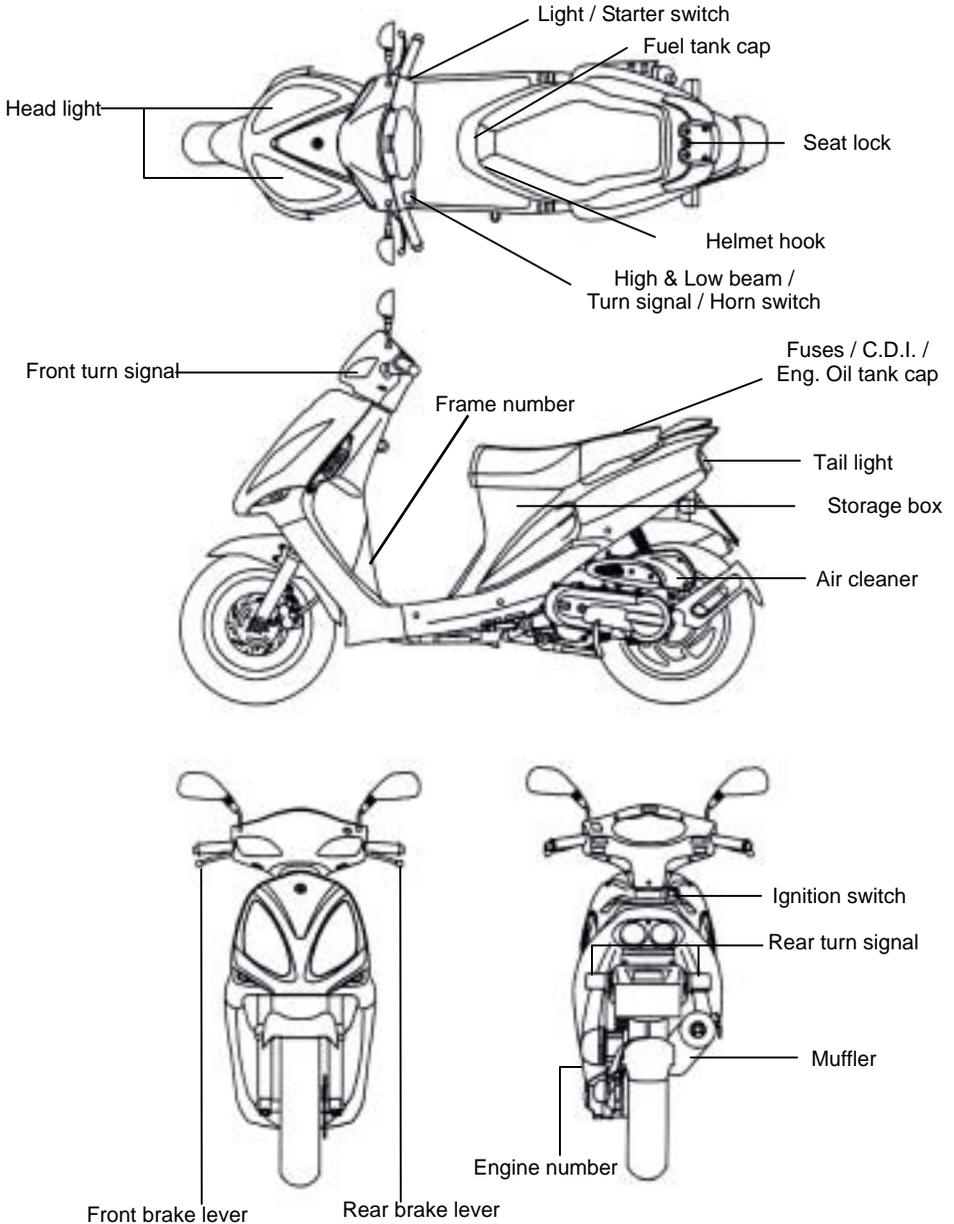
1. Contents	1
2. Control location	3
3. Before riding	8
4. Safety riding	8
5. Driving.....	9
6. Use genuine spare parts	9
7. Use of each component	10
Gauges	10
Operation of ignition switch	13
Use of buttons	14
Saddle lock	15
Safety helmet hook	15
Storage box.....	16
Fuel tank cap	16
Brake	16
Parking method	17
8. Important points and cautions for starting engine	18
9. The best way to drive off	19
The control of throttle valve handle	19
10. Inspection and maintenance before riding	19
Routine inspection	19
Inspection and replenishment of engine oil	20
Inspection of fuel level	20
Transmission oil inspection and change	21
Inspection and adjustment of brake free play	21
Disc brake inspection [Depending on models]	22
Throttle valve handle clearance adjustment.....	23
Inspection and maintenance of battery	23
Tire inspection	24
Steering handle front shock absorbers inspection	25
Checking and changing fuses	25
Checking the turn signal lights and horn	26
Checking the front and rear lights	26

Checking the brake light	26
Checking for fuel leakage	26
Checking the lubrication of body's various mechanisms	26
Checking the spark plug	27
Checking the air cleaner	27
11. When there is an abnormal condition or a trouble	28
Diagnosis when engine does not start	28
12. Periodical Maintenance Schedule	29
13. Specification	30
14. Postscript	32

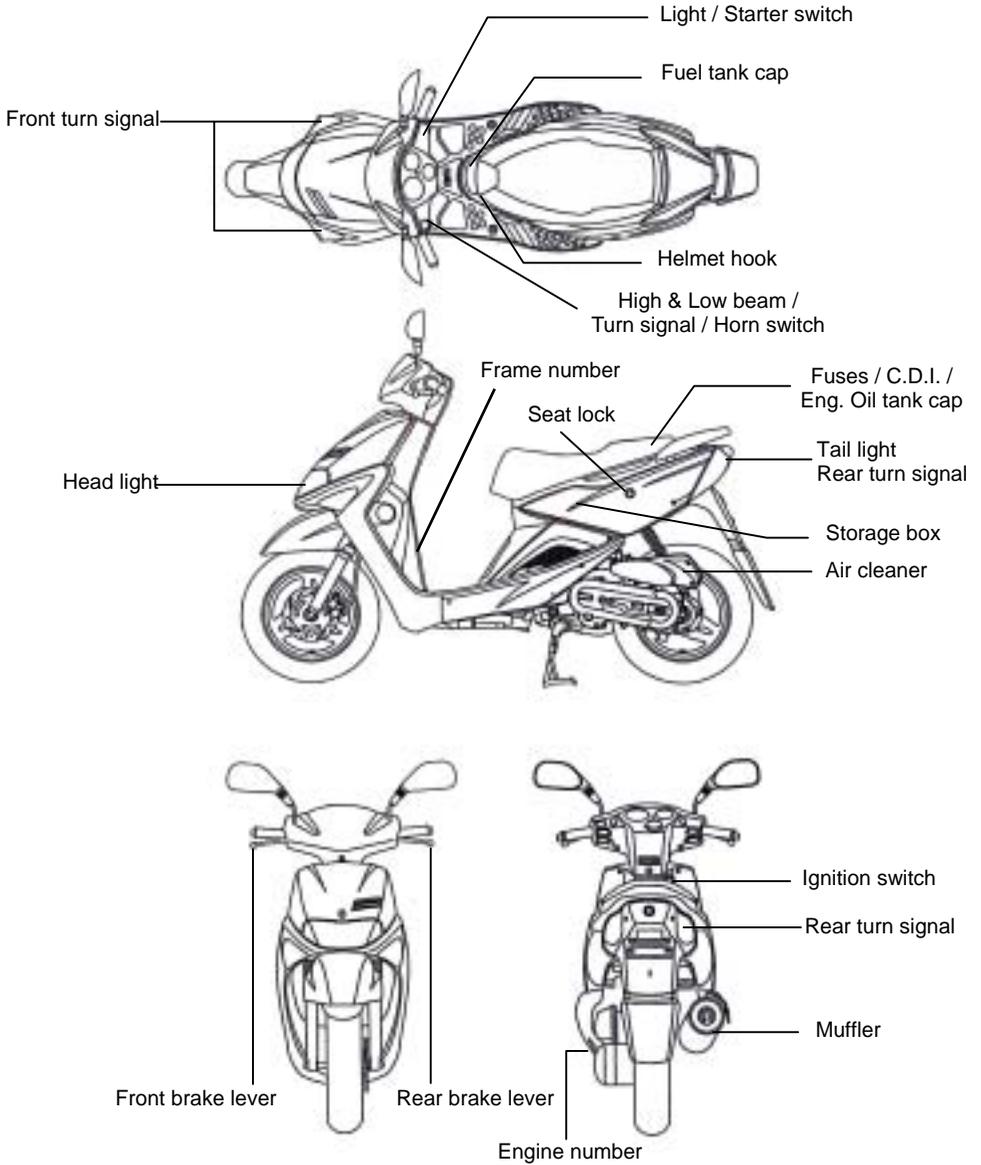
MODE : JET 50/100 SERIES (BL05WA-6)



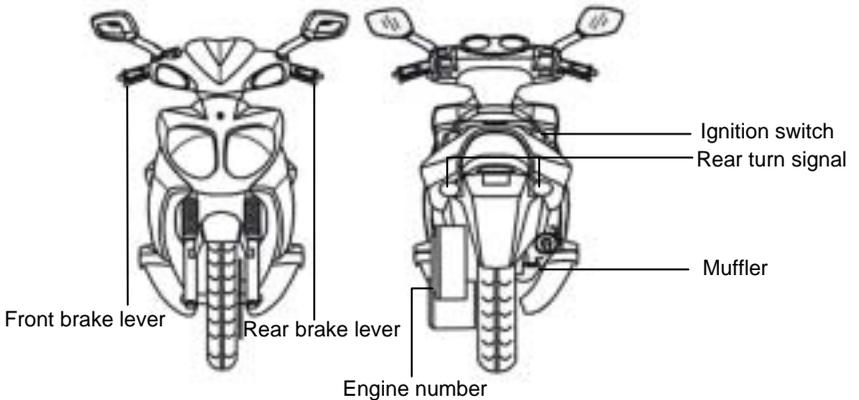
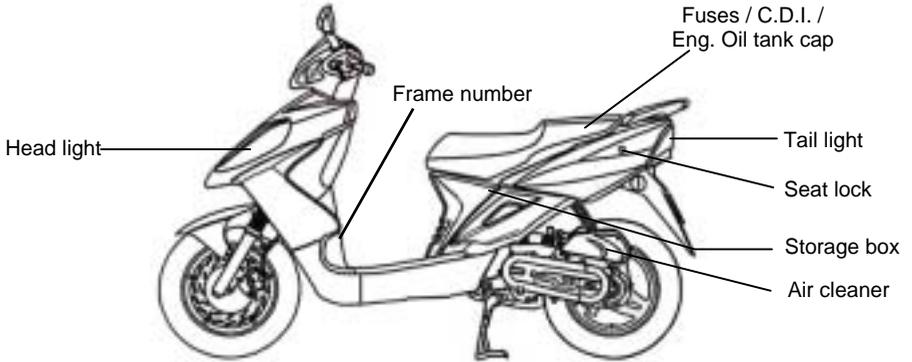
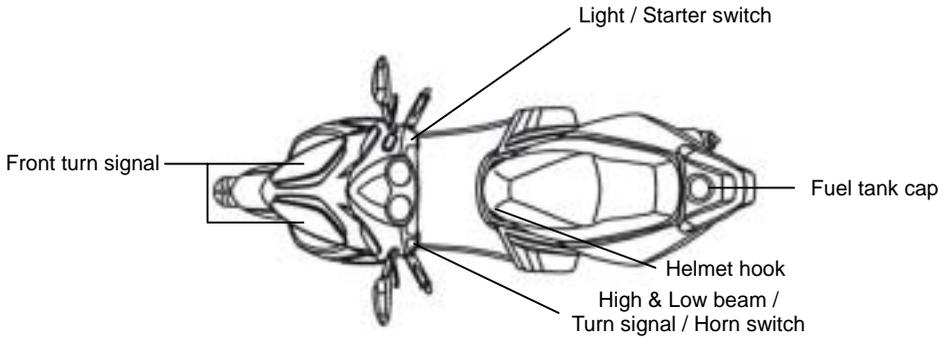
MODE : BL05W6-A SERIES



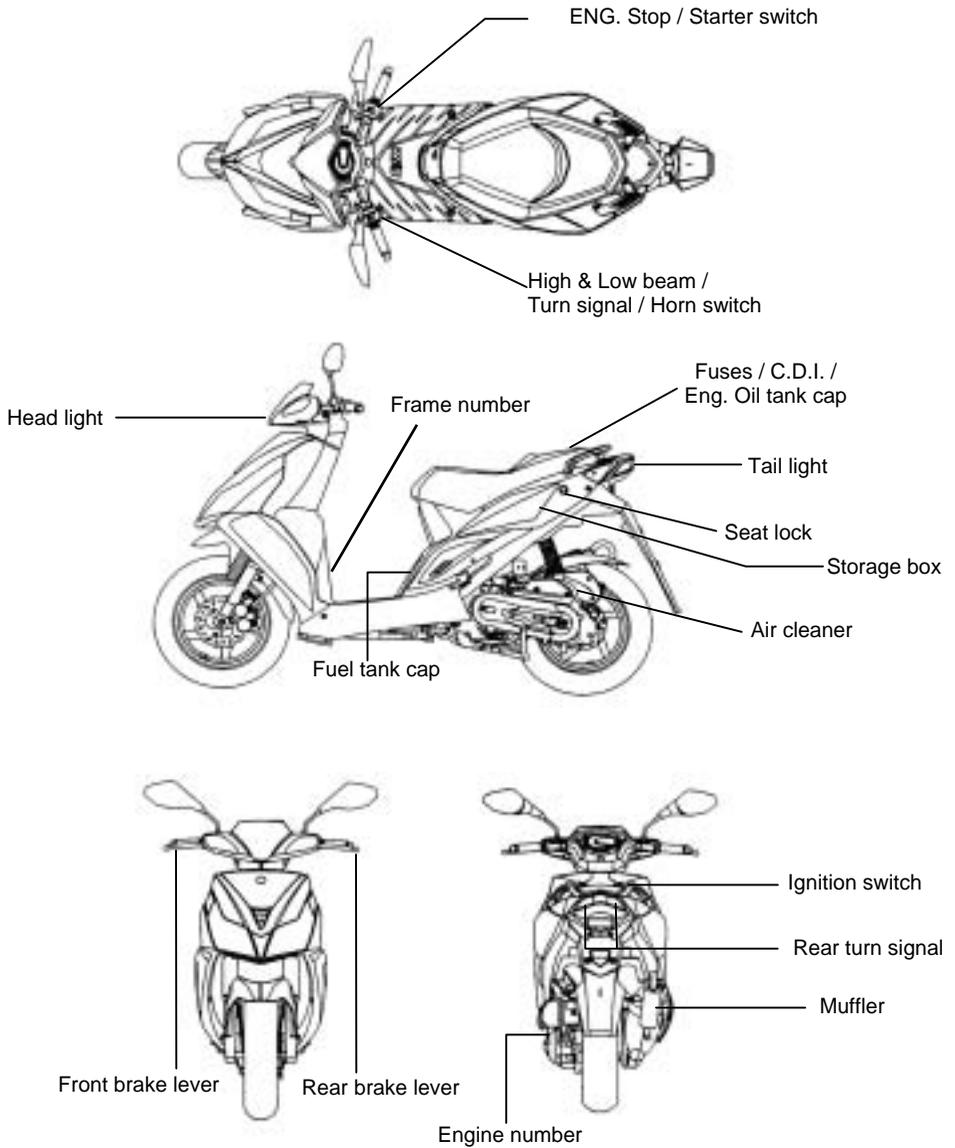
MODE : MASK SERIES (BF05W)



MODE : BS05W SERIES



MODE : Jet SportX 50 SERIES (BK05W)



This manual describes the correct usage of this scooter including safety riding, simple inspection methods and so on.

For a more comfortable and safety riding, please read this manual carefully.

Thank you very much for your patronage

In order to maximize your scooter's performance, a periodical inspection and maintenance should be completely carried out. We recommend that after riding your new scooter for the first 300 kilometers, you should take your scooter to the original dealer for an initial inspection, and to have your scooter inspected periodically every 1,000 kilometers thereafter.

- In case the scooter's specifications and construction are modified and different from the photos and diagrams on the owner's manual/catalogues, the specifications and construction of the actual scooter shall prevail.

4. SAFE RIDING

It is very important to be relax and clothe properly when driving, observe traffic regulations, do not rush, always drive carefully and relaxed.

Usually, most people would ride their newly bought scooter very carefully, but after they became familiar with their scooters, they tended to become reckless which may result in an accident.



To remind you:

- Please wear a safety helmet, and properly tighten the chin belt when riding a scooter.
- Clothes with open or loose cuffs may be blown by wind and cause the cuffs to get caught on the steering handle and thus affects riding safety. So, put on clothes with tight sleeves.
- Hold the steering handle by both hands when riding. Never ride with only one hand.
- Observe the speed limit.
- Perform periodical maintenance and inspection in accordance with the schedule.



WARNING!!

- To avoid getting burned by exhaust pipe when taking a passenger. Make sure your passenger has put his/her feet on the pedals.
- After running, the exhaust pipe is very hot, be careful not to get burned when conducting an inspection or maintenance.
- After running, the exhaust pipe is very hot, select a suitable location to park your scooter to avoid others getting burned by the exhaust pipe.



CAUTION:

- Modified scooter will affect its structure or performance, and cause poor engine operation or exhaust noise, which will result in shortening the scooter's service life. Besides, modification is illegal and does not conform to the original design and specifications. A modified scooter will not be covered by warranty, therefore, do not modify your scooter at will.

- Keep the related parts of your body such as arms, palms, lumbar, and toes relax and ride with the most comfortable posture in order to be able to react quickly whenever it is necessary.
- Rider's posture will great influent riding safety. As for the riding position, please always keep your body's gravity on the center of seat. If your body's gravity is placed on the rear of seat, the front wheel load will be reduced, this can cause steering handles shaking. Riding in this way is dangerous.
- It will be much easier to make a turn if rider inclines his body inward when turning. On the other hand, the rider will feel unstable if his body and the scooter do not incline.
- On bumpy, unleveled and slope road, the road condition may change often, driving on these roads may become very unstable. To drive safely and smoothly, know your road condition before hand, slow down, and hold the handle firmly with aid of your shoulder.
- Suggestion: Do not load objects on the front pedals unnecessarily, to avoid affecting the riding safety and the operation of steering handle.

**CAUTION:**

Feeling on the handle is different when the vehicle is with load or without load. Over-load will make steering handle swing and then influent riding safety. Thus, please be ware of load weight.

**CAUTION:**

- Please do not load cargo or luggage on places where are not designed for loading to prevent danger and damage.
- Do not place rags or similar objects between the storage compartment and engine to avoid engine seizure because of inadequate engine oil supply.

SUGGESTION

To maximize the scooter's performance and prolong its service life:

The first month or first 1000km is the wear- in period for the engine and components. Avoid rapid acceleration, and keep the speed below 60km/hr.

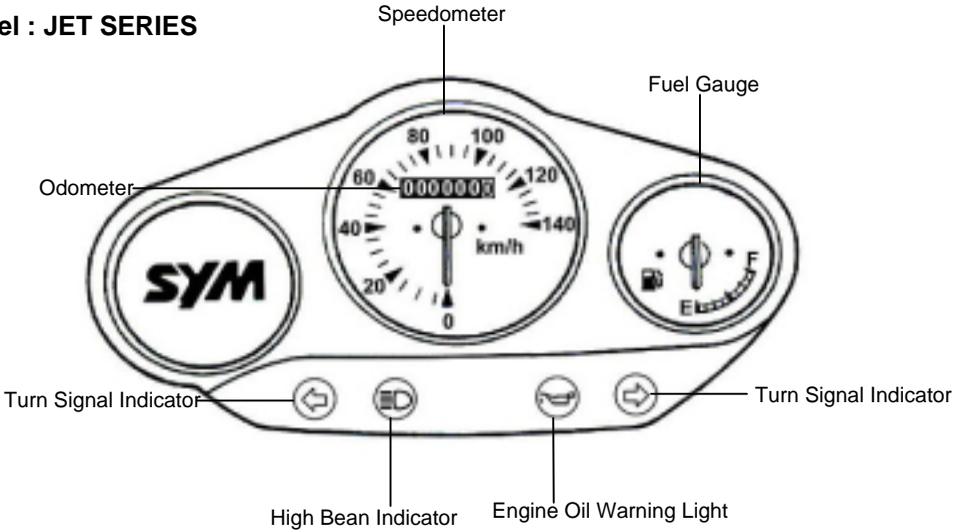
6. USE GENUINE SPARE PARTS

In order to maintain the scooter's best performance, each part's quality, material, and machined precision must conform with the design requirements. **"SYM Genuine Spare Parts"** were made from the same high quality materials used for the original scooter. No parts would be sold to the market until they could meet the designed specifications through sophisticated engineering and stringent quality control. Therefore, it is necessary to purchase **"SYM Genuine Spare Parts"** from **"SYM Authorized Dealers or Franchised Dealers"** when replacing spare parts. If you buy cheap, or fake substitute parts from the market, no guarantee can be provided either for the quality or durability. Also, it may result in unexpected troubles and lower the scooter's performance.

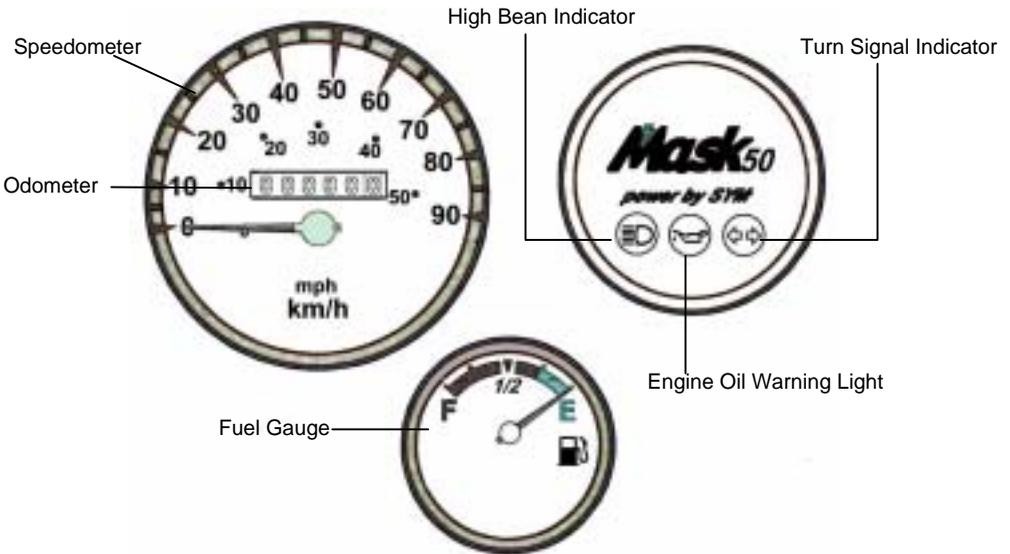
- Always use **SYM Genuine Spare Parts** to keep your scooters pure blood and to ensure its long service life.

Gauges

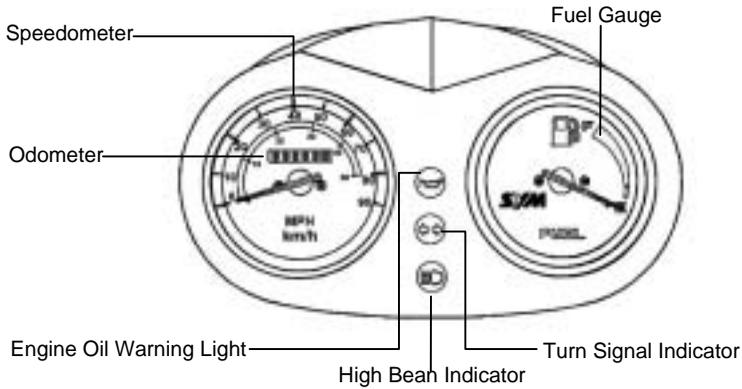
Model : JET SERIES



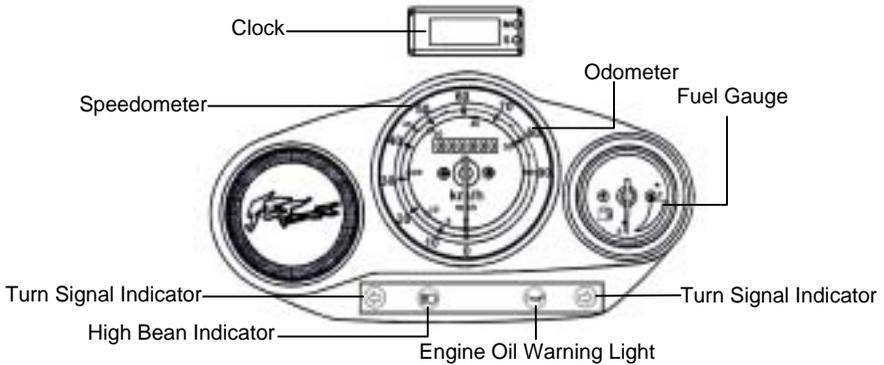
Model : MASK SERIES



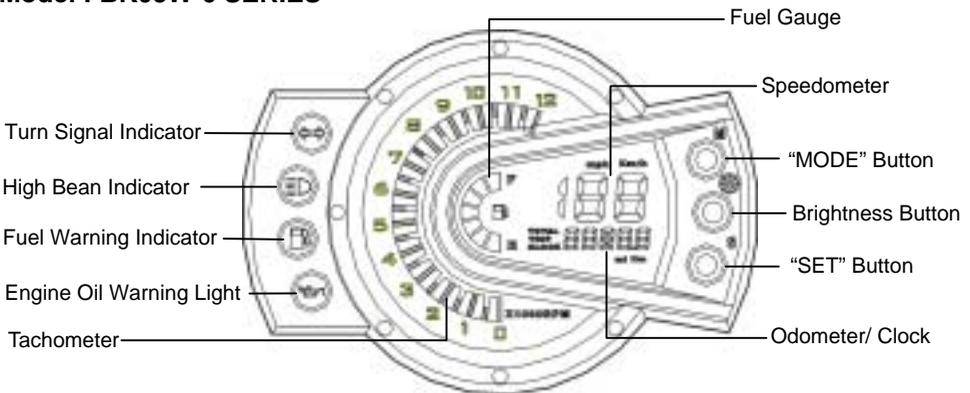
Model : BS05W SERIES



Model : BL05W6-A / G100P2 SERIES



Model : BK05W-6 SERIES



 **CAUTION:**

Do not wipe plastic components, e.g. instrument panel, headlight, with organic solvents such as gasoline...etc to avoid damaging these components.

1. Fuel Gauge

The pointer in this gauge shows how much fuel remains in the tank.

The pointer stays in "E" position when key switch is turned to "OFF."

When key switch is turned to "ON", and the "pointer" also in "E" position (red area). Refuel immediately.

2. Turn Signal Indicator

The left or right Indicator will be flashing according to the operated directions of turn signal light switch when it is turned on.

3. High Beam Indicator

This indicator comes on with high beam headlight is turned on.

4. Engine Oil Warning Light

Turn the main switch to the "ON" position, if the oil warning light comes on continuously, this indicates the engine oil level is too low, add oil as required.

 **WARNING:**

- To continue drive the vehicle under low oil level condition will result in an engine seizure due to lack of lubrication of engine parts. It is therefore very important to bring your vehicle to your dealer for an oil replenishment immediately whenever the warning light comes on continuously.
- Use only 2-cycle engine oil meeting Japanese Automobile Standard Organization FC specifications. Otherwise, this company will not assume any responsibility for damages resulted from using substandard engine oil.

Recommended oil: SYM EXTRA 2X oil.

5. Speedometer

This shows your speed in kilometers per hour (km/h) and in mileage per hour (mph).

6. Odometer

This odometer shows the total kilometers this motor has been driven.

7-1. Clock

Set time in 24 hour mode.

"M" – mode bottom: Press the "M" bottom, the clock order shows "Time mode", "Hour setting mode", "Minute setting mode", "Second setting mode". Final back to the "time mode".

"S" – set bottom: At "Hour setting mode" or "Minute setting mode" or "Second setting mode". Press the "S" bottom once, numerical can be increase. If keeping on pressing for 2 seconds can accelerate the adjustment. Until to set free the bottom. (At "Second setting mode", the colon ":" in the center will be flash for 1 seconds.

7-2. Clock

Please check the appendix for BK05W-6 series speedometer.P32

 **CAUTION:**

Observe the speed limit to ensure drive safety.

OPERATION OF IGNITION SWITCH

“ON” position

- Engine can be started in this position.
- Ignition switch key can not be removed.

“OFF” position

- Engine is shut off and can not be started in this position.
- Ignition switch key can be removed.

“LOCK” position

- Turn the handle all the way to left, then press down the key and turn the key to the “LOCK” position on the left.
- In this position, the handle is locked and the key can be removed.
- To unlock, simply turn the key from “LOCK” to “OFF”.

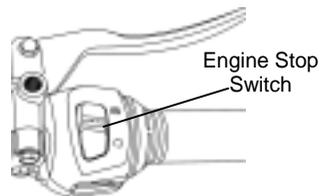
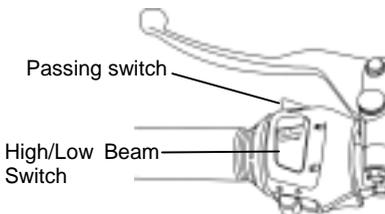
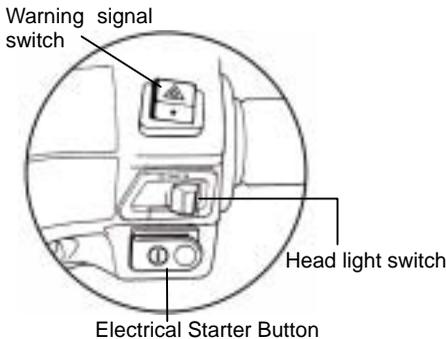
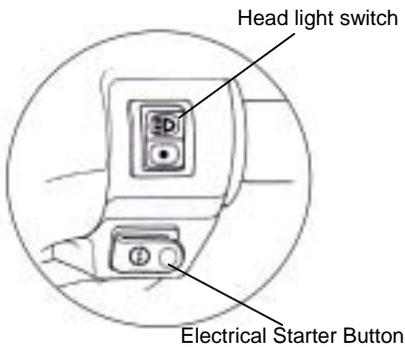
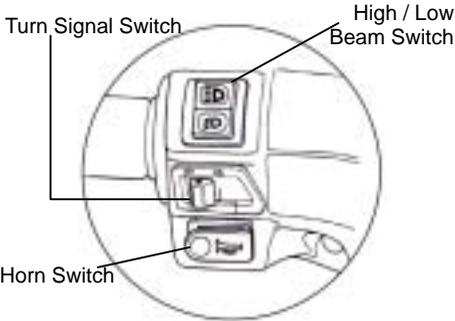
IGNITION SWITCH



CAUTION:

- Never operate the ignition switch key when the scooter is running. To turn the ignition switch to “OFF” and “LOCK,” will shut off the electrical system and that may result in a dangerous accident. Therefore, the ignition switch can only be turned off after the scooter has been completely stopped.
- Always remove the key and be sure to take the key away with you after locking the steering handle before leaving your scooter.
- If ignition switch remains in the “ON” position for a prolonged period after the engine has been stopped, the battery’s capacity will be reduced and this may affect the engine’s start ability.

USE OF BUTTONS



● Light Switches



OR



When the switch is turned to this position, headlight, rear light, instrument panel light, and position light will go on.



When the switch is turned to this position, rear light, instrument panel light, and position light will go on.



When the switch is turned to this position, all lights will go off. (Depending on Models)

● Electrical Starter Button



This is the electrical starter button, it is used for starting the engine.

When the ignition switch key turns to "ON" and brake lever hold, and then press this button down to start engine.

《This mechanism is designed for safety.

Thus, the front or rear brake lever must be hold before using this button so that engine can be started.》

⚠ CAUTION:

- Release this button immediately after engine has been started, and never press the button again to avoid damaging the engine.
- Do not use light system. Turn headlight and turn signal lights to the "OFF" position when the engine is being started.

● High/Low Beam Switch

This is the high and low beam of headlight switching switch. Press this switch to switch between high and low beams.



This is for high beam.



This is for low beam. (Please turn to low beam when riding in city)

● Turn Signal Switch

Turn signal lights are used when turning left/right or changing lane.

Turn ignition switch to "ON", and slide the turn signal switch to left or right. Then, the turn signal lights will flash.



Right-side turn signal light flashing means you intend to make a right turn.



Left-side turn signal light flashing means you intend to make a left turn.

● Horn Switch



Press this button down when ignition switch is in the "ON" position, the horn will sound.



CAUTION:

- Do not press this button when you are in the no horn area.

SADDLE LOCK

● Unlock:

Insert your ignition switch key into the lock on the lower left of the saddle, and turn the key to the right. Then, the saddle can be lifted up.

● Lock:

Press the saddle down and push it locks automatically.



CAUTION:

- Please do not put the key into the storage compartment after saddle is unlocked to prevent the key from being locked inside and can not be removed when the saddle is locked.
- Be sure to remove the key after the saddle has been locked

SAFETY HELMET HOOK

- Open the saddle, and hook the safety helmet chin belt onto the hook, and then lock the saddle.



CAUTION:

- Please do not hang your safety helmet as usual on the hook when driving, to prevent it from damaging the vehicle and affecting your driving safety.

● Engine Stop Switch



Switch to this position to turn off the engine when a state of emergency.



Switch to this position and the engine can be started.

● Passing Switch



Turn ignition switch "ON" and press this button down. Then, the high beam of headlight will come on immediately to warn the driver of the vehicle ahead that you intend to overtake him/her. (For overtaking, high beam indicator will come on at this time) This button will return to original position after releasing

STORAGE BOX

- ◆ This box is located under the saddle.
- ◆ Maximum load capacity: 10kg.
- ◆ Do not store valuables in the box.
- ◆ Please make sure that seat cushion had been locked completely after it was down. Take out valuables before washing to avoid wetting these objects.
- ◆ Do not place thermal sensitive objects in the box because of engine's heat and high temperature.

FUEL TANK CAP

1. Insert ignition switch key into the lock on the fuel tank cap, and turn the key to the right, then the cap can be removed.
2. Do not fill above the fuel upper limit when refueling.
3. Align the “ ” mark
4. on the cap with the “ ” mark on the body, and press down the cap in parallel until a “click” sound is heard. That means the cap is locked (the ignition key now turns back to the left slightly). To remove the ignition key, simply turn the key to the left and then remove it.



WARNING:

- Main stand should be put down on the ground, engine should be shut off and flames should be strictly prohibited to ensure safety when refueling.
- Do not fill above fuel upper limit when refueling. Otherwise, fuel will flow out through a hole on the cap that may damage the body's painting, in serious cases, it may cause a fire to burn down the scooter.
- Make sure the cap has been tighten properly.

BRAKE

- ◆ Use front and rear wheel brakes simultaneously when braking.
- ◆ Avoid unnecessary sudden braking.
- ◆ Using only the front brake or the rear brake increases the risk of falling because the scooter is tend to pulled to one side.
- ◆ Avoid brake continuously for a long period of time because that may overheat the brakes and reduce its braking efficiency.
- ◆ Slow down and brake early when riding in rainy days on slippery roads. Never apply the brakes suddenly to prevent skidding and falling.

For Rear Wheel



For Front Wheel



PARKING METHOD

● When approaching the parking lot:

1. Turn on the turn signal light early, and pay attention to the vehicles in front, from rear, left and right, then take the inner lane and approach slowly.
2. Return the throttle valve handle back to its original position, and apply brakes in advance. (Brake light comes on when braking to warn drivers of vehicles behind.)

● When stop completely:

1. Press the turn signal switch back to its original position, and turn the ignition switch key to "OFF" position to shut off the engine.
2. Get off the scooter from left side after the engine has been stopped, and select a parking place where the scooter will not interfere with traffic and the ground is level, then put down scooter's main parking stand.
3. Hold the steering handle with your left hand, and hold down the front end of saddle or hold the parking handle on the lower-left side of saddle with your right hand.
4. Press the main parking stand with your right foot, put down the main parking stand firmly on the ground.



To remind you: Lock the steering handle and remove the key after parking to prevent the scooter from being stolen.



CAUTION:

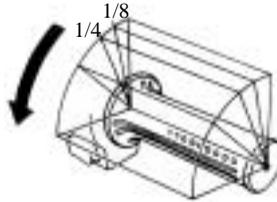
Park your scooter at a safe place where it will not interfere with traffic.

**CAUTION:**

- Please check the engine oil and fuel volume are adequate or not before starting engine.
- To start engine the main parking stand must be firmly on the ground and the brake is applied on the rear wheel to prevent the scooter from moving forward suddenly.

1. Turn ignition switch key to the "ON" position.
2. Apply hand (foot) rear wheel brake.
3. Do not accelerate, press starter button when the brake is applied.

[We care for you! Before drive off, keep the hand (foot) brake applied on the rear wheel.]

**CAUTION:**

- If engine can not be started after starter motor running for 3~5 seconds, turn the throttle valve handle 1/8~1/4 turns, and then press starter button again for an ease start.
- In order to avoid damaging the starter motor, please do not press the starter button continuously over 15 seconds.
- It is harder to get the engine started after the scooter has been left idle for a long time or after refueling only after the fuel has been depleted. Then, it is necessary to press starting lever or starter button several times, and keep the throttle valve handle at the close position to start the engine.
- It may need several minutes to warm up engine if it is a cold start.
- Exhaust contains harmful gases (CO), therefore please start the engine at a well ventilated place.

【When starting engine with starting lever】

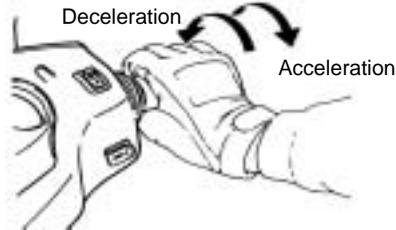
- Turn the main switch to ON, press the starting lever forcefully by foot with the throttle valve handle at the close position.
- If engine is difficult to start with the starting lever when the engine is cold, rotating the throttle valve 1/8~1/4 turns will make the start easier.
- Put the starting lever back to its original position after the engine has been started.

**CAUTION:**

- Firmly support the scooter with the main parking stand before starting the engine with the starting lever.
- Start engine with the starting lever occasionally to prevent it from loosing its function because of unused for a long time.

THE CONTROL OF THROTTLE VALVE HANDLE

- Turn on the turn signal light before moving, and make sure no vehicle is coming from behind. Then, drive off.
- During driving, attention should be paid to vehicles ahead and behind and keep highly alert at all times.



10.INSPECTION AND MAINTENANCE BEFORE RIDING

ROUTINE INSPECTION

Check Items		Check Key Points
Engine oil		Is there enough engine oil?
Fuel		Is it enough? Is it Octane 90 or above
Brake	Front	Braking condition? [Brake lever free play: 10~20mm]
	Rear	Braking condition? [Brake lever free play: 10~20mm]
Tires	Front	Is tire pressure normal? [Standard: 1.75g/cm ²]
	Rear	Is tire pressure normal? [Standard: 2kg/cm ²]
Steering handle		Does the handle vibrate abnormally or is difficult to turn?
Speedometer, lights, and rearview mirror		Is it operated properly? Do lights come on? Can it be seen clearly from behind?
Tightness of main components		Are screws, nuts loosen?
Abnormal points		Do the previous troubles still exist?

CAUTION:

- If any problem founded during routine inspection, correct the problem before using the scooter again, have your scooter checked and repaired by the “**SYM dealer or authorized service personnel**” if necessary.

INSPECTION AND REPLENISHMENT OF ENGINE OIL

Inspection:

- Turn the main switch to the “ON” position, if the oil warning light comes on continuously, this indicates the engine oil level is too low, add oil as required.
- Check oil tank and oil lines for leakage.



WARNING:

- To continue drive the vehicle under low oil level condition will result in an engine seizure due to lack of lubrication of engine parts. It is therefore very important to bring your vehicle to your dealer for an oil replenishment immediately whenever the warning light comes on continuously.
- Use only 2-cycle engine oil meeting Japanese Automobile Standard Organization FC specifications. Otherwise, this company will not assume any responsibility for damages resulted from using substandard engine oil.

Recommended oil: SYM EXTRA 2X oil.

Replenishment:

1. Using the main stand to support the vehicle on a level ground, lift up the saddle, and remove the oil tank cover.
2. Turn the oil tank cap to the left to remove. Add oil until reaches to the standard level.
3. Screw in the oil tank cap until properly tightened, then reinstall the tank cover and lower the saddle and press it down until locked.

Add oil note:

- Use only 2-cycle engine oil meeting Japanese Automobile Standard Organization FC specifications. Otherwise, this company will not assume any responsibility for damages resulted from using substandard engine oil.
- When adding oil, do not let foreign materials, dust, dirt enter into the oil system, do not use different brands mixed oil, because this will affect the engine's performance.
- Do not add oil above the standard level. Clean spilled oil around the oil tank cap.
- Be sure to tighten the oil tank cap properly after adding oil.

INSPECTION OF FUEL LEVEL

- Firmly support the scooter with its main stand on a leveled ground, turn the main switch to “ON” position, check if the fuel meter needle moves.
- Fuel gauge may be defective or electric circuit disconnected if there is some fuel in the tank, but the needle does not move. Please drive slowly to **an authorized service station** to have your scooter checked.

Note: It is not necessary to start engine to check the fuel level.

TRANSMISSION OIL INSPECTION AND CHANGE

INSPECTION:

- Use the main stand to support the scooter on a level ground, after the engine stops, wait for 3~5 minutes. Remove the transmission oil infusion bolt, put a measuring glass under the drain bolt, and remove the drain bolt. Let the oil flows into measuring glass and check for decreased or not. (at disassembly: 120 c.c. / at change: 100~110 c.c.).

OIL REPLACEMENT:

- Stop the engine and use the main stand to support your scooter on a level ground. Remove the infusion bolt and drain bolt, drain out the oil.
- Install the drain bolt and tighten it. Fill new transmission oil (100~110 c.c.), and install the infusion bolt and tighten it. (make sure that bolts are tightened and check that there's no leakage.)
Recommend Oil: Genuine SYM HYPOID GEAR OIL (SAE 85W-140).

Use SAE85-90 when outside temperature is below 0 .

INSPECTION AND ADJUSTMENT OF BRAKE FREE PLAY

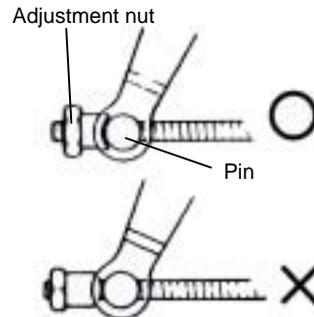
INSPECTION: (Brake lever free play must be checked with the engine shut off.)

- Brake lever free play for front and rear wheels
When checking the hand-braking lever for front and rear wheels, its free play (the stroke of hand-braking lever from no braking to initial braking) should be 10~20mm.
It is abnormal if the feel is spongy when holding the hand-braking lever forcefully.



Adjustment:

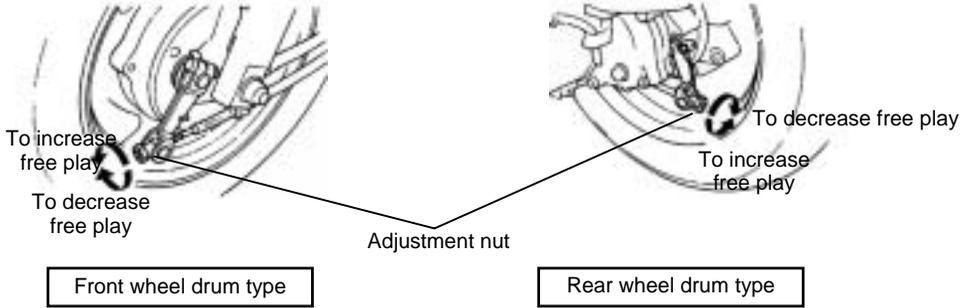
- The indentation of brake adjustment nut must be aligned with the pin. (see right figure)



CAUTION:

- When free play is between 10~20 mm, check brake indicators of front and rear wheels. If the arrow on the brake arm aligned with the “ ” marked on the brake disk, that means the brake lining has been excessively worn, and must be replaced immediately.

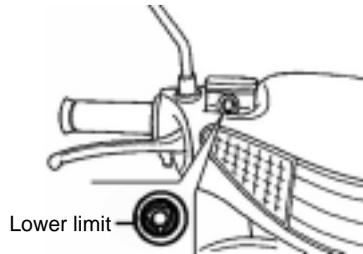
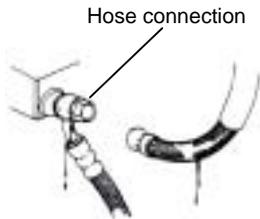
- Turn the adjustment nut on brake arm of front and rear wheels to adjust the free play of hand-brake lever.
- Hold the hand-brake levers after adjusting with both hands until there is effective brake feeling.
- Measure the free play with a rule.



Front wheel drum type

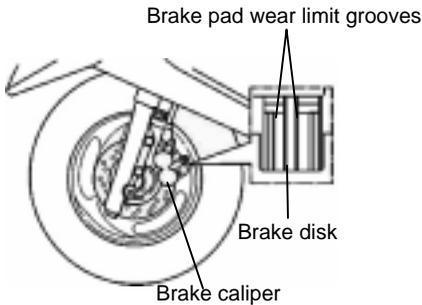
Rear wheel drum type

DISK BRAKE INSPECTION [Applicable for model equipped with disc brake.]

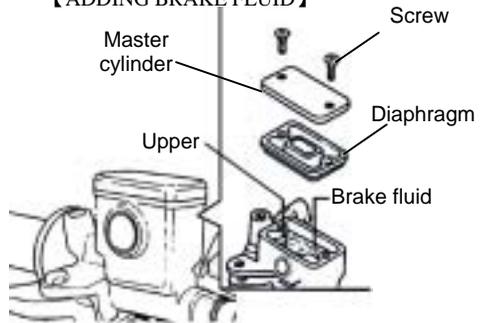


Viewing window

- Visual Inspection for leakage or damage. If there is any, take your scooter to SYM Authorized Dealer or Franchised Dealer for a check or repair.
- Park the scooter on a level ground, and check if fluid level is under the “LOWER” mark. Recommended Brake Fluid: WELL RUN BRAKE OIL (DOT 3).



【ADDING BRAKE FLUID】



Check the brake from behind the brake caliper. The brake pad must be replaced with new lining when the brake pad wear limit reaches the brake disk.

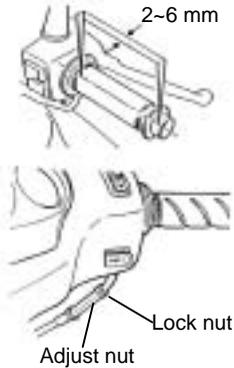
⚠ CAUTION:

Do not fill above the upper limit when adding brake fluid and avoid dropping on painting or plastic components to prevent damage.

1. Loosen the screws and remove the master cylinder cover.
2. Wipe clean foreign materials, dirt around the reservoir, being careful not to let foreign materials fall into the reservoir.
3. Remove the diaphragm plate and the diaphragm.
4. Add brake fluid to upper level.
5. Install the diaphragm plate and the diaphragm, and install the master cylinder cover.
6. Please note the diaphragm direction, and do not let foreign materials fall into the reservoir. And tighten the master cylinder cover securely.

THROTTLE VALVE HANDLE CLEARANCE ADJUSTMENT

- Correct clearance allows throttle valve handle to rotate 2-6mm.
- To adjust, first loosen the fixing nut, then turn the adjusting nut to the proper position and securely tighten the fixing nut.

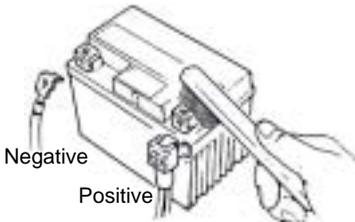


Check Items:

1. Check throttle valve cable to see if it can be moved smoothly from a closed position to a wide open position.
2. Rotate steering handle from side to side to check if the throttle valve cable is interfered.
3. Check to see if the throttle valve cable is obstructed by other cables preventing it from being operated smoothly.

INSPECTION AND MAINTENANCE OF BATTERY

- This scooter is equipped with a maintenance-free type battery, so it is unnecessary to check and add electrolyte. Have your scooter checked by SYM Authorized Dealer or Franchised Dealer should any abnormality is found.



Remove the battery terminals and clean if there are dirt and corrosion on them.

Battery removal procedures are as follows:

Turn ignition switch "OFF," and remove negative cable screw firstly and disconnect the negative cable. Then, remove positive cable screw and positive cable.

⚠ CAUTION:

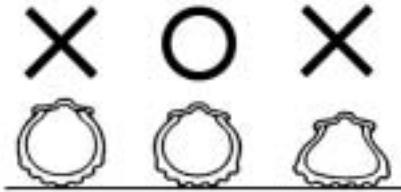
- Clean the battery posts with warm water if the posts are eroded and have some white powders on them.
- If there is an obvious erosion on the terminals, disconnect the cables, then clean the erosion off with a steel brush or a piece of sandpaper.
- Install battery cable after cleaning and apply a thin coat of grease on the terminals.
- Install battery in reverse order of removal.

⚠ CAUTION:

- This is a closed type battery. Never remove the caps.
- In order to prevent electric leakage and self-discharge when the battery sits idle for long periods. Remove battery from scooter, store it in a well-ventilated and dimly lighted place after the battery has been fully charged. Disconnect battery's negative cable if the battery is still kept on the scooter.
- If the battery needs to be replaced, replace with a same closed-type battery (Maintenance-Free).

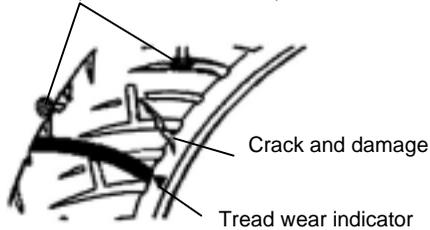
TIRE INSPECTION

- Tires should be checked and inflated with the engine shut off.
- If a tire's ground contacting curve is abnormal, check it with an air pressure gauge and inflate it to the specified pressure.
- Tires pressure must be checked with an air pressure gauge when cold.



PLEASE REFER TO SPECIFICATIONS FOR STANDARD TIRE PRESSURE

Foreign materials (nails or small stones)



- Visual check tires for frontal and lateral side walls for crack or damage.
- Visual check tires for any nails or small stones wedged in the tread.
- Check the "tread wear indicator" condition to see if tread groove depth is insufficient.
- A tire with a wear bar showing is worn out and should be replaced immediately.

⚠ CAUTION:

Abnormal tire pressure, wear, or crack is the most important cause that results in the loss control of the steering handle and a punctured tire(s).

STEERING HANDLE FRONT SHOCK ABSORBERS INSPECTION

- Perform this check with engine shut off and ignition switch key removed.
- Visual check front shock absorbers for damage.
- Operate steering handle up and down, and check front shock absorbers for noises due to bends.
- Check the bolts and nuts of front shock absorbers with wrenches for tightness.
- Shake steering handle up & down, left & right, and front & rear to check if it is loosen, has too much resistance and pulls to one side.
- Check steering handle if it is being pulled too tight by the brake cables.
- Take your scooter to SYM Authorized Dealer or Franchised Dealer for a check or adjustment if any abnormal conditions are found.

【 Figures on the right are for operation checks only 】

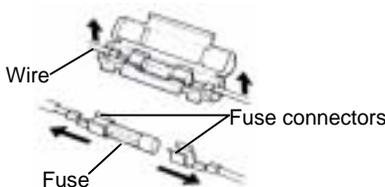


CHECKING AND CHANGING FUSES

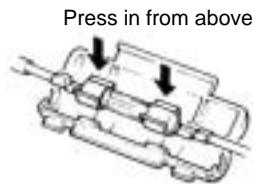
Turn off ignition switch, and check fuses if they are intact. Replace the blown fuse with a new one having the same specified amperage rating (7A). Using a fuse of more than 7 amperes, a brass or iron wire to replace a blown fuse is strictly prohibited to avoid damaging the electrical system and the circuit.

- Remove the battery cover screws, and open the battery cover. Fuses are installed in the fuse box located by the battery.
- Fuses must be firmly secured with wire connectors when replacing.
- Use only parts having the specified specification to replace electrical components such as light bulbs. Using parts not having the specified specifications for replacement may cause the fuse to blow and over-discharge the battery.
- Avoid spraying water directly on or around fuse box when washing the scooter.
- Take your scooter to your dealer for an inspection if a fuse is blown by unknown causes.

【 REMOVE 】



【 INSTALLATION 】



CHECKING THE TURN SIGNAL LIGHTS AND HORN

- Turn the ignition switch key to “ON” position.
- Turn on the turn signal light switch, and make sure that the front & rear and left & right signal lights flashes and also check if the warning buzzer sounds.
- Check turn signal light covers if they are dirty, crack, or loosen.
- Press horn button to check if it works.



CAUTION:

- Specified specification bulbs should be used for turn signal lights. Otherwise, the normal operation of turn signal lights will be affected.
- Turn on the turn signal light before turning or switching lane to warn driver of vehicles behind.
- Turn off the turn signal light immediately by pressing its button down after using. Otherwise, the flashing of twin signal lights may confuse the drivers of vehicles behind.

CHECKING THE FRONT AND REAR LIGHTS

- Turn the ignition switch key to “ON” position, start the engine and then turn on the front light switch. Check if front and rear lights come on.
- Check the brightness and direction of front light by projecting the light on the wall to see if it is correct.
- Check the front light cover if it is dirty, crack, or loosen.

CHECKING THE BRAKE LIGHT

- Turn the ignition switch key to “ON” position, hold the hand-braking levers for front and rear wheels. Check if the brake lights come on.
- Check the brake light cover if it is dirty, crack, or loosen.



CAUTION:

- Use only specified specification bulbs, do not use bulbs with different specifications to avoid damaging electrical system, burning out bulbs, and discharging the battery.
- Do not modify or add other electrical components to prevent over load or short circuit which may result in a fire and burn down the scooter in serious cases.

CHECKING FOR FUEL LEAKAGE

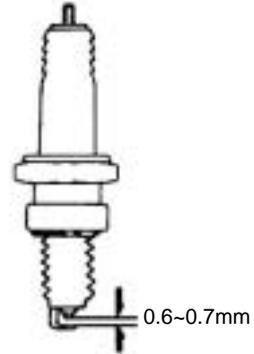
- Check fuel tank, fuel hoses, and carburetor...etc. for leakage.

CHECING THE LUBRICATION OF BODY'S VARIOUS MECHANISMS

- Check the body's pivot points if they have enough lubrication.
(For example, the pivot points on the main stand, the side stand, and the brake lever...etc.)

CHECKING THE SPARK PLUG

- Remove the cap of high tension cable. (Use a plug wrench in tool box to remove the spark plug by turning it counterclockwise.)
- Check the electrode if it is dirty or fouled by carbon deposits.
- Remove the carbon deposits on the electrode with steel wire, and clean the spark plug with gasoline, then, wipe dry with a rag.
- Check the electrode, and adjust its gap to 0.6–0.7mm. (Check it with a feeler gauge)
- Hand tight the spark plug as far as it can go and then tighten it another 1/2~3/4 turns with a wrench.



WARNING: The engine is very hot after running. Pay attention not to get burned.

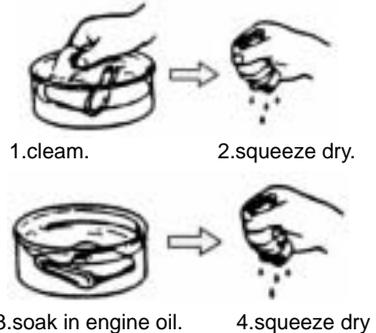
Use only spark plugs suitable for the engine specifications of this scooter recommended by the manufacturer. (Refer to specifications.)

CHECKING THE AIR CLEANER

《DISASSEMBLE PROCEDURE》

1. Remove the screw of air cleaner cover.
2. Remove the air cleaner cover and then the cleaner's element.
3. Clean or replace the element.
(For checking interval please refer to maintenance schedule.)
4. Refer to figures shown on the right for air cleaner element cleaning steps.

Procedures for cleaning air cleaner element:



《ASSEMBLE PROCEDURE》

- Assemble the air cleaner in reverse order of disassemble.

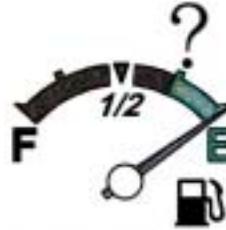
CAUTION:

- Dust deposit is one of the major causes of reducing output horsepower and increasing fuel consumption.
- Change the air cleaner element more frequently to prolong the engine's service life if the scooter is driven on dusty roads very often.
- If air cleaner is installed improperly, dust will be absorbed into cylinders, which may cause a premature wear and reducing output power and engine life.
- Be careful not to soak the air cleaner when washing the scooter. Otherwise, it will cause engine hard to start.

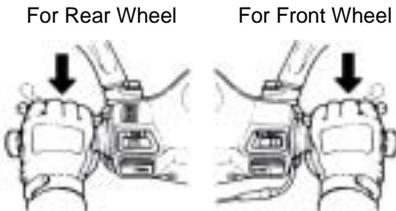
DIAGNOSIS WHEN ENGINE DOES NOT START



1. Does the ignition switch key turn to "ON" position?

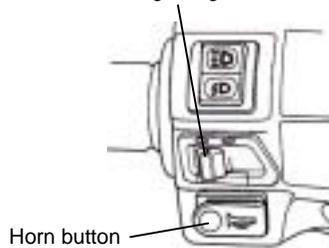


2. Is there fuel in the fuel tank?



3. Is the rear or front wheel brakes being hold when pressing starting button?

The turn signal light switch



4. Turn the ignition switch key "ON", and press horn button. The fuse may blow if horn not sounding.

[Please go to SYM authorized dealer or franchised dealer immediately if there are no problems on above conditions and engine still can not be started.]

Item	Maintenance kilometer	300KM	Every 1,000KM	Every 3,000KM	Every 6,000KM	Every 12,000KM	Remarks	
	Check Items	NEW	1 Month	3 Months	6 Months	1 Year		
1	Air cleaner element(Remark)	I		C	C	R		
2	Fuel filter	I			I	R		
3	Tire, pressure	I	I					
4	Battery	I	I					
5	Brake and brake clearance checking	I	I	I	I	I		
6	Spark plug	I		I		R		
7	Carburetor(idle speed)	I			I			
8	Ignition timing	I	I	I	I	I		
9	Steering bearing and handles	I		I				
10	Check Transmission for leakage	I	I					
11	Check crankcase for leakage	I	I					
12	Transmission Oil	R	Replacement for every 5,000KM(5 Months)					
13	Drive Belt/roller				I	R		
14	Light / electrical / meters	I	I	I	I	I		
15	Fuel tank switch and lines	I		I				
16	Throttle valve operation and cable	I	I					
17	Engine bolts and nuts	I		I				
18	Cylinder head, cylinder, and piston				I			
19	Exhaust system/cleaning carbon				I			
20	Greasing on chassis				L	L		
21	Front/rear suspension	I			I			
22	Main/side stands	I			I/L			
23	Clutch disk				I			
24	Operation of oil pump rod	I		I				
25	Brake mechanism/brake lining (pad)	I	I					
26	Bolts/nuts for each components	I	I					

◇ The above maintenance schedule is established by taking the monthly 1,000 kilometers as a reference which ever comes first.

* Have your scooter checked and adjusted periodically by your SYM Authorized Dealer or Franchised Dealer to maintain the scooter at the optimum condition.

Code: I ~ Inspection, cleaning, and adjustment R ~ Replacement

C ~ Cleaning (replaced if necessary) L ~ Lubrication

Remark: 1. Clean or replace the air cleaner element more often when the scooter is operated on dusty roads or in the Heavily- polluted environment.

2. Maintenance should be performed more often if the scooter is frequently operated in high speed and after the scooter has accumulated a higher mileage.

Item	Model	JET Euro50	JET 50	RED DEVIL50	BL05WA
	Specification	BL05W6			
Length (mm)	1,785				
Width (mm)	680				
Height (mm)	1,125			1,115	
Wheel base (mm)	1,275				
Net Weight	94 kg				
Type	2- stroke single cylinders engine				
Fuel	Unleaded gasoline (octane 90 or higher)				
Cooling type	Air-cooled				
Bore	Ø 39 mm				
Stroke	41.4 mm				
Displacement	49.4 cc.				
Compression ratio	7.2:1				
Max. HP	3.2 kW / 7,000 rpm			2.6 kW/6,000rpm	
Max. torque	4.6 Nm / 6,500 rpm			4.2Nm/5,500rpm	
Starting methods	Electrical & kick type				
shock absorber	Front : Telescope / Rear : Unit swing				
Clutch	Dry/auto centrifugal clutch				
Transmission	C.V.T., auto speed change				
Front tire	120/70-12				
Rear tire	130/70-12				
Tire pressure	Front: STD 1.75kg/cm ² / Rear: STD 2.0 kg/cm ²				
Front brake (Disc type)	(Ø 190 mm)				
Rear brake (drum type)	(Ø 110 mm)				
Front light bulb(high, low)	12V15W X 2	12V35W/35W X 1	12V35W X 2		
Brake light bulb(tail light)	12V5W / 21W X 2				
Turn signal light bulb	12V 10W				
Engine oil tank capacity	1.2 L				
Transmission oil capacity	120 cc. (100~110 cc. for change)				
Fuel tank capacity	6.3 L				
Fuse	7A				
Spark plug	BR 8HSA				
Battery capacity(MF battery)	12V 4Ah				
Air cleaner	Sponge type				

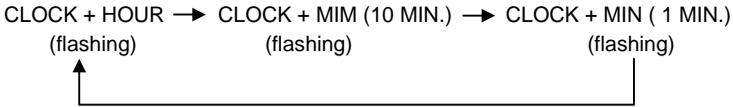
Item	Model	JET Sport X 50 BK05W	MASK 50 BF05W	RS 50 BS05W	G100-P2
	Specification				
Length (mm)		1,840	1,835	1,870	1,785
Width (mm)		690	650	700	630
Height (mm)		1,120	1,110	1,130	1,125
Wheel base (mm)		1,275	1,280	1,335	1,275
Net Weight		98 kg	94 kg	108 kg	97 kg
Type	2- stroke single cylinders engine				
Fuel	Unleaded gasoline (octane 90 or higher)				
Cooling type	Air-cooled				
Bore	Ø 39 mm			Ø 51 mm	
Stroke	41.4 mm			49.6 mm	
Displacement	49.4 cc.			101.3 cc.	
Compression ratio	7.2:1			6.3:1	
Max. HP	2.6 kW/6,000rpm	3.2 kW/6,500rpm	2.8 kW/6,000rpm	6.21 ps/6,250rpm	
Max. torque	4.2 Nm/5,500rpm	5.1 Nm /6,000rpm	4.58 Nm/5,000rpm	0.76 kg-m/5,500rpm	
Starting methods	Electrical & kick type				
shock absorber	Front : Telescope / Rear : Unit swing				
Clutch	Dry/auto centrifugal clutch				
Transmission	C.V.T., auto speed change				
Front tire	120/70-12		100/90-12(59J)		120/70-12
Rear tire	130/70-12		130/70-12(59J)		130/70-12
Tire pressure	Front: STD 1.75kg/cm ² / Rear: STD 2.0 kg/cm ²				
Front brake (Disc type)	(Ø 190 mm)		(Ø 273 mm)		(Ø 190 mm)
Rear brake	Drum (Ø 110 mm)		Drum (Ø 110 mm)		
	Disc (Ø 160 mm)				
Front light bulb(high, low)	12V35W/35W X 1			12V25W/25W X 2	
Brake light bulb(tail light)	LED	12V5W / 21W X 1		12V5W/21W X 2	
Turn signal light bulb	12V 10W				
Engine oil tank capacity	1.2 L				
Transmission oil capacity	120 cc. (100~110 cc. for change) [winter :SAE 85W-90 ; summer : SAE85W-140]				
Fuel tank capacity	6.3 L		7.5 L		6.3 L
Fuse	15A		7A		
Spark plug	BR 8HSA			BR 6HSA	
Battery capacity(MF battery)	TTZ 7SL	12V 4Ah		12V 3Ah	12V 4Ah
Air cleaner	Sponge type				

FUNCTION : Set time in 12 hour mode

There are three buttons on the speedometer, explanation as below :

1. SET button “S”:

- a. Under TRIP mode, press “S” button continuously to reset the TRIP kilometer readings.
- b. Under ODO mode and the vehicle is standing still, press SET for above 2 seconds to enter CLOCK mode. Press “S” button shortly to enter time setting mode.



- c. Under CLOCK mode, press “M” button shortly to increase the readings, once per one time.
- d. Under time setting mode, press “S” button continuously to exit this setting mode.

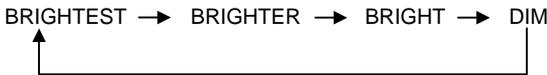
2. MODE button “M”:

- a. Press “M” button to change between “TOTAL””TRIP””CLOCK” modes.



- b. When the engine oil lamp lights on, press “M” button continuously to put it out.
- c. The readings will remain there after main switch is turn off.

3. Brightness button” 



- a. Press ”  ” button to adjust the brightness.
- b. The setting will remain there after main switch is turn off.

Under TOTAL mode, press “S” button continuously to change between “kilometer” & ”mileage” readings.