

Owner's manual

BRIO 125-3




Nipponia S.A.



INTRODUCTION

This Owner's Manual contains basic instructions on how to operate, inspect and maintain your motorcycle. Please read it carefully and thoroughly. Correctly operating, maintaining and repairing your motorcycle will minimise any possible risks and result in its best performance. The authorised Nipponia service points will be glad to provide you with more detailed instructions.

Important information contained in this manual is marked using the following symbols:

-  **NOTE:** Important information or instructions
-  **ATTENTION:** Important information or instructions. Failure to follow these instructions may result in damage to your motorcycle or minor injury
-  **WARNING:** Important information or instructions. Failure to follow these instructions may result in heavy damage to your motorcycle, serious injury or even death

This manual is an integral part of the motorcycle and must always accompany it, even in the event of a resale.

If you have any questions concerning the contents of this manual or need further information regarding the operation of your motorcycle, do not hesitate to contact your local Nipponia dealer.

This booklet is compiled with the latest available information. However, due to constant improvements, modifications or alterations may be made without prior notification. Updated versions can be downloaded from the Nipponia website www.nipponia.com.



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SAFETY INFORMATION

Safe riding

1. Always perform the pre-operation inspection before driving.
2. The motorcycle should not be used by anyone who does not hold a valid driving license.
3. Many accidents involve motorcycles not seen by other drivers, so please pay attention to the following:
 - Wear bright-coloured clothes.
 - Do not drive too close to other vehicles or in another driver's blind spot.
 - Avoid overtaking.
4. Always follow local traffic regulations.
 - Driving above the speed limit is the reason for many accidents. Driving speed must not exceed the limit specified by traffic regulations and allowed by road conditions.
 - Always signal when turning or changing lanes in order to attract the attention of the other drivers.
5. Never drive under the influence of alcohol or other drugs; it dramatically increases the risk of accidents.
6. Exercise special attention when driving over crossroads or parking area exits.
7. When driving you must hold the handlebars with both hands and place your feet on the driver steps. The passenger should hold the handgrips or the driver and place his feet on the pillion steps.
8. This motorcycle is designed for on-road use only. It is not suitable for off-road use.



SAFETY INFORMATION

Protective clothing

1. For your safety, the driver and passenger should both wear helmets. Use of additional safety apparel (gloves, glasses, protective wear) is recommended.
2. Do not wear loose clothing, as it may be caught by the handle levers, the kick starter or the wheels and could lead to an accident.
3. During or after operation, the muffler's temperature is very high. Exercise extreme caution as it can cause burns.

Vehicle modifications

Making any modifications to the motorcycle or replacing the original components can affect its performance and safety and/or render it illegal for use. Observe applicable laws and all national and local regulations concerning vehicle equipment. Additionally, such modifications will cancel the warranty.

Loading

Adding accessories or cargo to your motorcycle can adversely affect stability and handling if the weight distribution of the motorcycle is changed. Use extra care when riding a motorcycle with extra load. Here are some general guidelines to follow when loading cargo or adding accessories to your motorcycle:

1. All accessories must be fastened securely on the vehicle in order to minimise vibration that could cause instability.
2. Any extra load should be placed as close to the gravity centre as possible and must be equally



SAFETY INFORMATION

distributed on both sides of the motorcycle to avoid imbalance and instability.

3. The tyre pressure must be adapted to the weight of the load and road conditions.
4. Make sure that extra load is securely attached to the vehicle to prevent it from falling and being lost.
5. Do not hang any load on the handlebars or the suspension.
6. The total weight of the driver, passenger, accessories and cargo must not exceed the maximum load limit of the motorcycle (**160kg**).

Accessories

When installing accessories not approved by Nipponia, attention should be paid to the following points:

1. The installation of the accessories must not affect the suspension travel, the light position and the steering angle.
2. Do not obstruct the ventilation duct, to ensure adequate cooling of the engine.
3. Avoid installing any accessories that could hinder your access to vehicle controls and movement of your hands and feet as it could impair your reaction in an emergency event.
4. Do not install a bulb with higher power than that specified. It could burn the fuse or cause problems to the electrical system due to low voltage.
5. Do not add a sidecar to the motorcycle.

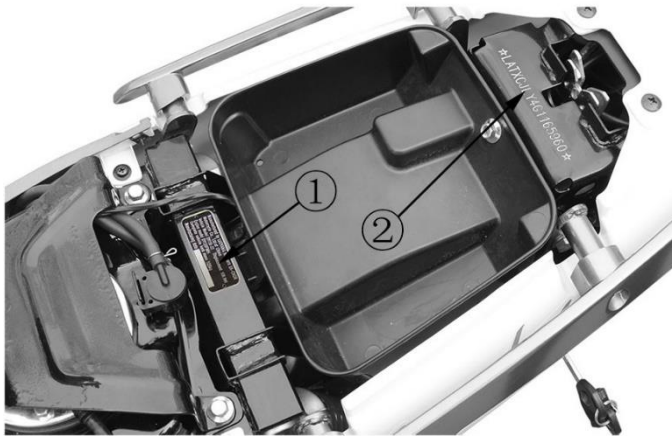
Warning labels

The warning labels are sited on your vehicle. They contain particularly important information for both your safety and the optimum performance of your scooter. Information on the vehicle's tyres is also provided (see pg. 31 of this manual).



VEHICLE IDENTIFICATION

The **Engine number (3)** is engraved on the left lower part of the engine case. The **Frame label (1)** is located on the middle tube of the frame, under the seat. The **Vehicle identification number-VIN (2)** is located on the rear bar of the motorcycle frame, under the seat.



NOTE:

- Please make a note of your motorcycle's VIN and Engine number, so you can place your orders quickly when purchasing spare parts from Nipponia.

You can write your motorcycle's identification numbers here:

Vehicle identification number:

Engine number:



VEHICLE DESCRIPTION

Left view



1: Gearshift, 2: Left driver footstep, 3: Main stand, 4: Side stand, 5: Left pillion step,
6: Seat lock, 7: Helmet hook



VEHICLE DESCRIPTION

Right view

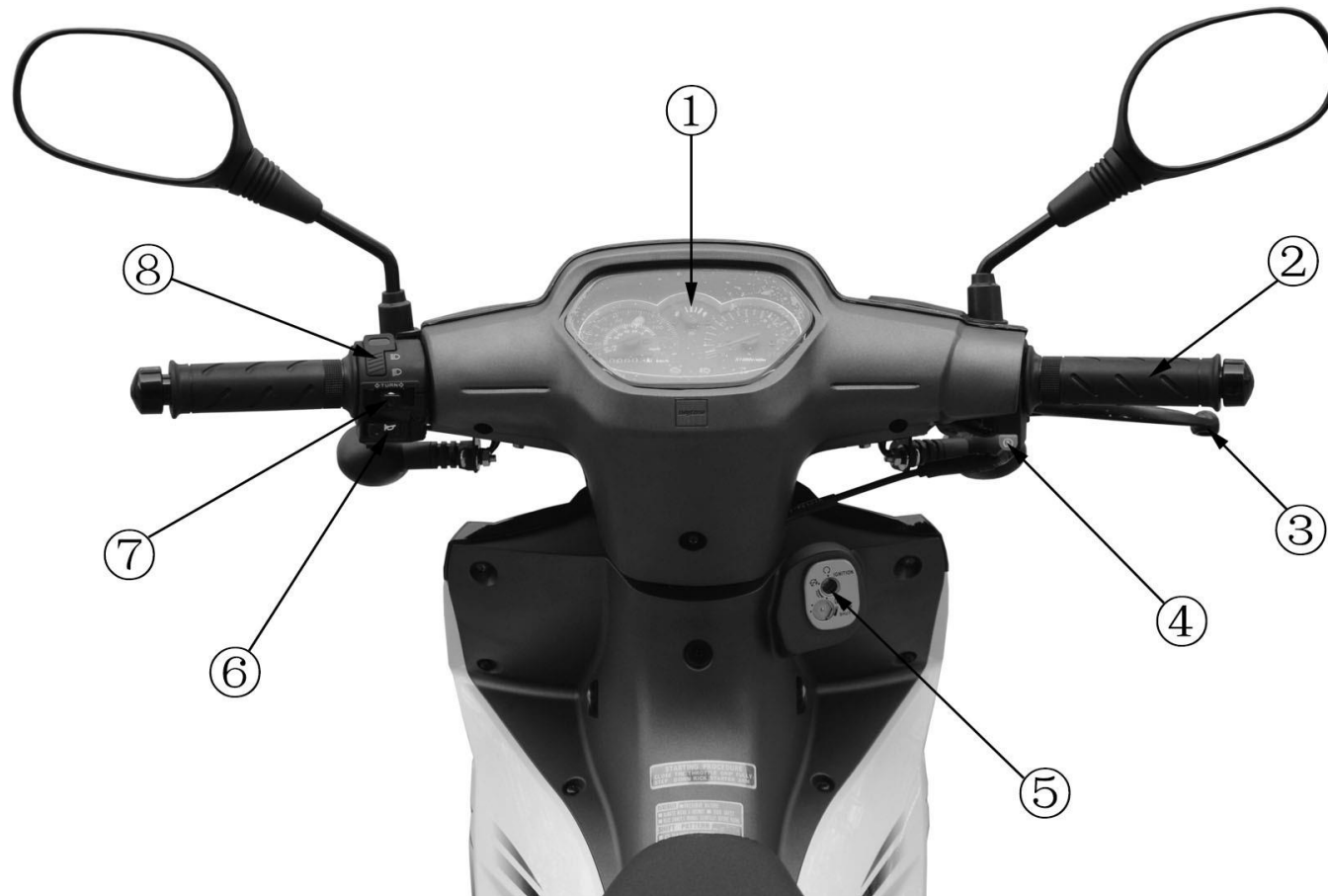


1: Kick starter arm, 2: Rear brake pedal, 3: Foot step, 4: Right pillion step,
5: Exhaust muffler



VEHICLE DESCRIPTION

Instruments and controls

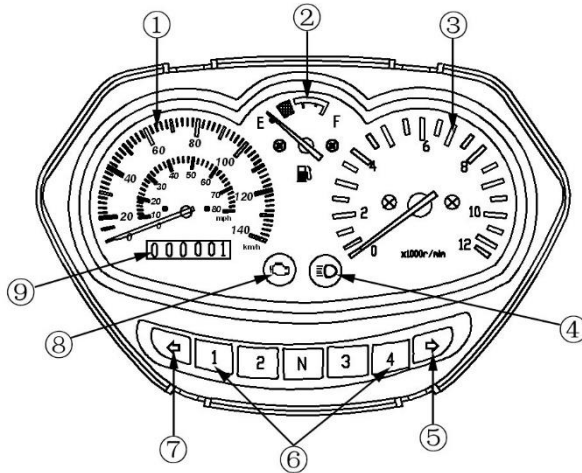


1: Instrument panel, 2: Throttle grip, 3: Front brake lever, 4: Start button, 5: Ignition switch,
6: Horn button, 7: Turn signal switch, 8: Dimmer switch



MAIN COMPONENTS

Instrument Panel



Speedometer (1)

This meter displays the current driving speed in km/h and mph.

Fuel gauge (2)

This gauge indicates the amount of fuel left in the fuel tank. When the hand reaches the F (Full) mark, there are 3.5L in the tank. When it reaches the red area, there is about 1L left in the tank and it needs to be refilled.

Tachometer (3)

This meter displays the current rotation speed of the engine in rpm.

High Beam light (4)

This indicator lights when the dimmer switch is in the high beam position.

Right turning signal indicator (5)

This indicator flashes when right turn signal light is on.

Gear display (6)

It indicates the number of the current position of the gear.

Left turning signal indicator (7)

This indicator flashes when left turn signal light is on.



MAIN COMPONENTS

EFI trouble indicator (8)

When the engine starts, the indicator lights for 3 seconds.

Odometer (9)

This meter displays the accumulated mileage of the motorcycle in km.


Controls

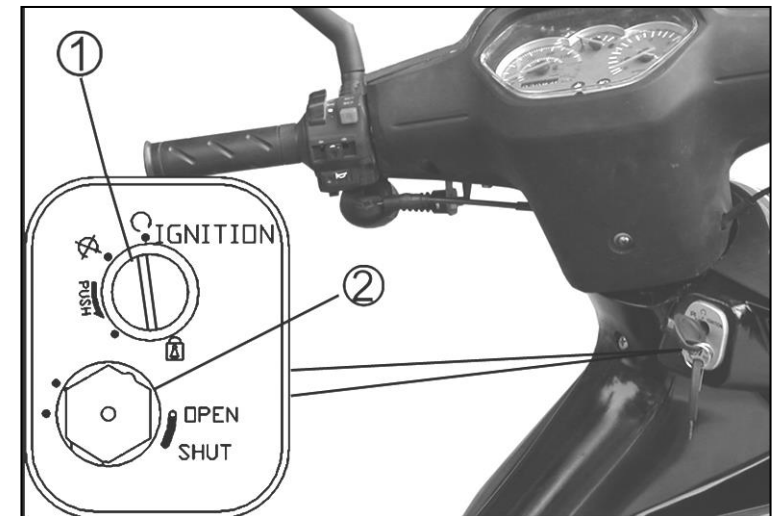
Main/Ignition switch (1)

The main switch is located at the upper right part of the frame body. It is used to control the ignition and electrical systems, and to lock the steering wheel. To use it insert the ignition key. The switch can then be turned to the following positions:

“” **ON**: The engine and the electrical system are on and the key cannot be removed.

“” **OFF**: The engine and the electrical system are off, and the key can be removed.



“” **Steering lock**: The steering is locked and cannot be turned, the engine and the electrical system are off and the key can be removed.





MAIN COMPONENTS

Steering lock

To lock the steering, turn the handlebars all the way to the left and insert the key in the main switch **(1)**. Then press down and, while pressing, turn to “” position to lock. To unlock the steering, insert the key and turn it to “” position.

To prevent from theft, always lock the steering when parked.

NOTE:

- When locking the steering, the handlebars must be turned to full left position and the key should be pressed properly.
- After locking the steering, move the handlebars slightly to check whether they have locked.

WARNING:

- Never turn the key to “” or to “” position while driving as it may cause an accident.

Anti-theft switch (2)

The anti-theft switch is located under the ignition switch. It isolates the ignition circuit and protects your motorcycle from theft.

To activate the anti-theft switch first remove the ignition key from the ignition switch and use the special key of the anti-theft switch (at the top side of the ignition key). Then turn the special key clockwise to the “SHUT” position. The ignition circuit has been cut-off. Turn the special key counter-clockwise to the “OPEN” position when you want to start the ignition switch.



MAIN COMPONENTS

Right handlebar switches

Start button (1)

To start the engine, using the starting button, make sure that you shift the gear to neutral and you raise the side stand. Press the start button to start the engine.



Left handlebar switches

Dimmer switch (1)

This switch controls the headlight beam (with the light switch in “☀” position).

Turn signal switch (2)

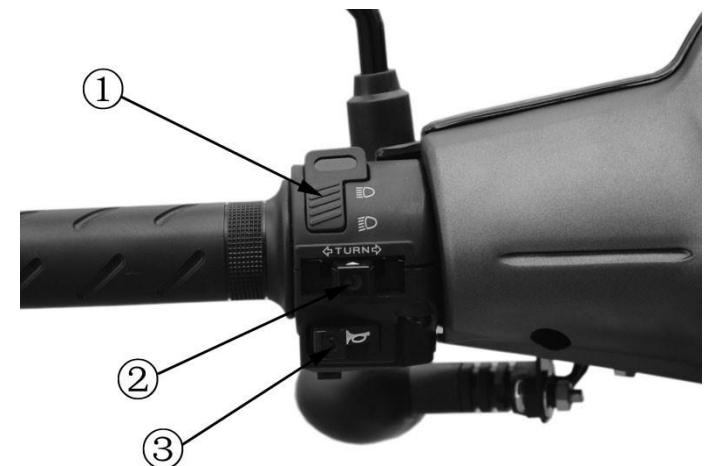
Push and hold this switch to “☞” position to signal a left-hand turn or to “☛” position to signal a right-hand turn. The switch returns to the centre position automatically.

Horn button (3)

Press this button to sound the horn.

“☀”: High beam

“☼”: Low beam





MAIN COMPONENTS

Seat

To open the seat, first unlock it from the seat lock (at the left side) turning the key clockwise and then lift it up.

To close the seat, lower it down and push the rear part of the seat until you hear a clicking sound. This indicates that the seat is locked. Then you can remove the key from the lock.

Always make sure that the seat is securely locked before driving.

Storage compartment

The storage compartment is located under the seat. Its maximum loading capacity is 5kg.

NOTE:

- Be careful while washing your motorcycle, as the storage compartment may get wet.
- Do not keep valuable items in the storage compartment.

WARNING:

- You should not exceed the maximum loading weight (5kg) of the storage compartment, as it may affect the control and stability of your motorcycle.
- As the storage compartment is near the engine, which can reach high temperatures, avoid storing any low heat-resistant or flammable items.

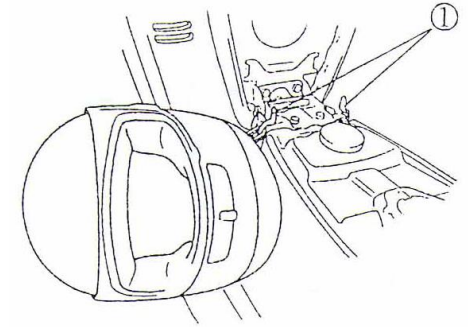


MAIN COMPONENTS

Helmet hook

Your motorcycle is provided with two helmet hooks (one for the driver and one for the pillion passenger). To hang your helmet, first open the seat, hang the helmet on the hook **(1)**, close and lock the seat.

To unhang your helmet, open the seat, take the helmet off the hook and lock the seat.

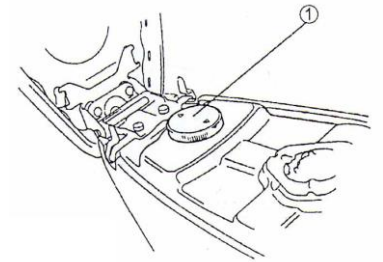


! WARNING:

- You can use the hook only after you park your vehicle.
- Do not leave your helmet on the hook when you are driving.

Fuel Tank

The fuel tank is located under the seat. To refuel lift the seat and turn the fuel tank cap **(1)** counter-clockwise to open it. After refuelling make sure to close the fuel tank tightly by turning the fuel tank cap clockwise.



1: Fuel tank cap

Fuel

Use only 90-97 octane unleaded gasoline.



MAIN COMPONENTS

! WARNING:

- When refuelling, be careful not to spill any gasoline out of the tank. After refuelling, please check around the fuel tank for any gasoline and make sure it is dry before starting the engine.
- Avoiding breathing any gasoline vapours.
- Keep away from children.

! WARNING:

- Gasoline is highly flammable and may be explosive. Always turn off the engine before refuelling.
- Never smoke while refuelling and avoid sparks, flames or any other source that could ignite the fuel.
- Do not overfill the tank. After refuelling, always make sure that the cap is securely closed.



DRIVING INSTRUCTIONS

Pre-operation Inspection

Always perform the pre-operation inspection, before driving your motorcycle. Failure to do so may result in vehicle damage or an accident.

The time required to perform the necessary inspection is very short. However, it both ensures your safe driving and, in the long term, saves you time from vehicle repairs.

Make sure to inspect the following items:

Item	Inspection
Fuel	<ul style="list-style-type: none">- Check the fuel level and refuel if necessary- Inspect the fuel circuit for any fuel leakage
Engine oil	<ul style="list-style-type: none">- Check the engine oil and refill to the specified level if necessary- Inspect the motorcycle for any oil leakage
Front and rear brakes	<ul style="list-style-type: none">- Check operation of the brakes- Inspect condition of the brake pads- Check the brake fluids and refill to the specified level if necessary- Inspect the hydraulic system for any leakage
Wheels and tyres	<ul style="list-style-type: none">- Check tyre condition and tyre wear- Check for any potential damage to the wheels or tyres- Inspect the air pressure and adjust if necessary



DRIVING INSTRUCTIONS

Item	Inspection
Drive chain	<ul style="list-style-type: none">- Check condition of the drive chain- Check lubrication of the drive chain and lubricate if necessary
Throttle grip	<ul style="list-style-type: none">- Check operation of the throttle grip. It should be able to turn smoothly and be fully opened and closed- Inspect condition and free play of the cable
Brake levers	<ul style="list-style-type: none">- Check whether the brake levers operate smoothly and lubricate the joints if necessary
Lights and instruments	<ul style="list-style-type: none">- Inspect operation of the headlight, rear light, brake light, turn signal lights, horn and panel instruments

If you need assistance on how to perform any of the above-mentioned tasks, do not hesitate to contact an authorised Nipponia service point.

! WARNING:

- If any item in the pre-operation inspection list is not functioning properly, have it inspected and repaired before operating the motorcycle.


Starting the Engine

Before starting the engine make sure to raise the side stand. You can rest the motorcycle on the main stand. To start the engine, use A or B starting mode:



DRIVING INSTRUCTIONS


A. The start button

1. Turn the main switch to “” position
2. Make sure that the shift is turned to the neutral gear (the “N” gear indicator lights on the instrument panel).
3. Make sure that the choke lever is closed.
4. Close the throttle completely and do not turn it
5. Press the start button to start the engine.

When the engine starts, release the button and open the throttle grip fully.

B. The kick starter

Make sure to raise the side stand and rest the motorcycle on the main stand

1. Turn the main switch to “” position
2. Make sure that the shift is turned to the neutral gear (the “N” gear indicator lights on the instrument panel).
3. Make sure that the choke lever is closed.
4. Close the throttle completely and do not turn it
5. Step down the kick starter with force and the engine will start.

! ATTENTION:

- Always apply the rear brake during engine starting to prevent the motorcycle from moving forward.
- Release the start button once the engine has started.
- Do not press the start button while the engine is running, as it could cause damage.



DRIVING INSTRUCTIONS

NOTE:

- If the engine does not start after pressing the start button for 3-4 seconds, turn the throttle grip open a little. It may make the engine easier to start.
- After long term inactivity periods it may be difficult to start the engine. In such a case, hold the start button a little more than usual and turn the throttle grip open a little.

NOTE:

- Review the safety information contained in this manual before driving.
- Always perform the pre-operation inspection before driving.

Driving

1. Start the engine as previously described.
2. Push the vehicle off the main stand, holding the rear brake lever.
3. Get on the motorcycle, keeping at least one foot on the ground to support and prevent from falling.



DRIVING INSTRUCTIONS

4. Adjust the rear-view mirrors
5. Shift into 1st gear
6. Before taking off, turn on the signal light and make sure it is safe to go
7. Release the brake and gradually twist the throttle grip open

NOTE:

- The driving speed is controlled by the throttle grip. Turn the throttle grip open to increase the speed and close it to decrease it.

WARNING:

- Do not turn the throttle grip too abruptly to avoid falling off the vehicle.

Braking

When you need to brake, close the throttle grip and use both front and rear brakes. Press the brake levers smoothly, gradually increasing the pressure.

NOTE:

- Applying only one of the brakes (front or rear) results in reduced braking power.

WARNING:

- Avoid braking while turning as it could cause the motorcycle to skid or fall.
- When driving on a wet or slippery road the braking distance is longer than usual. Reduce the driving speed and brake in advance, or you may lose balance and fall.





DRIVING INSTRUCTIONS

! ATTENTION:

- When driving downhill, close the throttle grip and use both brakes alternatively, maintaining a low speed.
- Do not hold the brake lever and do not rest your foot on the brake pedal while driving, as it may cause abnormal wear to the brakes. Also, it will turn the brake light on, affecting the drivers behind you.
- For low speed drive use a small shift gear instead of continually using of the brake.

Parking


1. Switch on the turn signal light in advance and check for approaching vehicles.
2. Close the throttle grip and apply the brakes slowly, so the brake light will turn on and warn vehicles from behind.
3. When the vehicle stops, switch off the turn signal light.
4. Shift the gear to the neutral position.
5. Turn the main switch to “” position to stop the engine.
6. Rest the motorcycle on the main stand.
7. To prevent from theft, always lock the steering when parking (main switch on “” position) and remove the ignition key.
8. Turn the special key of the anti-theft switch to the “SHUT” position for a long time parking.



DRIVING INSTRUCTIONS

Engine Break-In

! WARNING:

- Park the motorcycle on a flat and stable surface to prevent it from falling.
- When you park on a slope, position the motorcycle facing upwards to prevent it from falling.
- Do not turn the ignition switch to “” position during driving. It may cause a malfunction in the electrical system and lead to an accident.

Breaking-in your motorcycle is very important, as it helps to prolong the life of the engine. The break-in period is the first 1000km.

During the period from 0 to 500km, driving speed should not exceed 40km/h, while from 500 to 1000km it should not exceed 50km/h.

During the engine break-in period do not put heavy loads on the motorcycle and avoid driving at full throttle or constant speed for a long time.

The max recommended speed depending on the driving gear is shown in the following table:

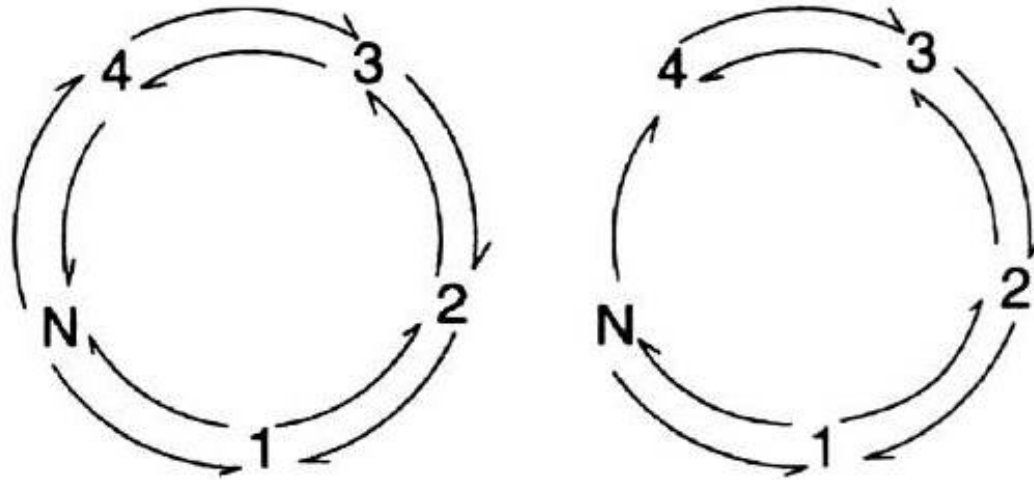
Gear	1 st gear	2 nd gear	3 rd gear	4 th gear
Accumulated mileage	Max. speed in km/h			
0-500km	15	25	35	45
500-1000km	20	35	50	60



DRIVING INSTRUCTIONS

Gear shifting

Two shifting modes can be used on your motorcycle. The first shifting mode **(A)** can be used when your motorcycle is parked and the second shifting mode **(B)** when your motorcycle is on driving mode. When your motorcycle is stopped, e.g. on the traffic light you can shift into neutral gear directly from the 4th gear. The same cannot be done while driving.



(A) Gear shift mode in parking state (B) Gear shifting in driving mode

! WARNING:

- When you shift gears, reduce the driving speed and close the throttle.
- Step the gearshift pedal with your foot until the engagement of the gears.
- Do not rest your foot on the gearshift pedal while driving. It may cause damage in the transmission system and clutch.



SERVICE AND MAINTENANCE

Maintenance Schedule

Item	Period of maintenance in km				
	First 500	Every 1000	Every 3000	Every 6000	Every 12000
Fuel system	I		I		
Throttle controlling system	I		I		
Air Cleaner			C		R
Spark plug	I		I		R
Valve clearance	I		I		
Oil screen	I		C		
Battery	I		I		
Braking pad and shoe wear			I		
Braking light switch				I	
Brake fluid	I		I		
Headlight beam setting				I	
Steering bearings	I				I
Throttle valve operation				I	
Fuel pump filter		Replace every 8000km			
Drive chain	I	I			
Engine oil	R	Replace every 2500km			

The vehicle must be serviced according to the maintenance and service schedule. The symbols in the schedule chart stand for:

I: Inspect or Clean or Lubricate or Replace, if necessary,

A: Adjust,

C: Clean,

R: Replace

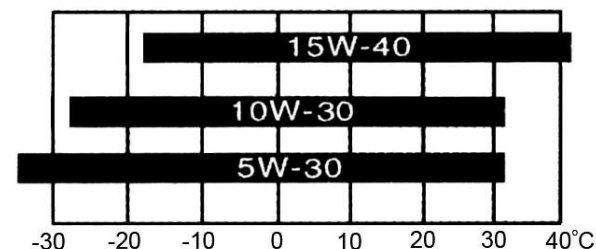


SERVICE AND MAINTENANCE

Engine oil

This motorcycle should use four-stroke engine oil. There is no need for any additives. Do not use common oil, vegetable oil or castor oil.

The viscosity of the engine oil varies according to local average environmental temperature. You should choose the right viscosity or grade of oil for different temperatures. Lubricating oil has three grades: SAE 15W-40, SAE 10W-30, SAE 5W-30. Refer to the side figure for details.

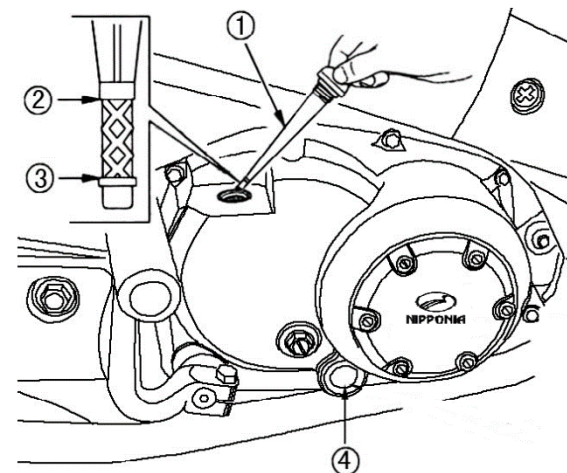


Engine oil level inspection

The engine oil level must be checked daily before riding. The level should be between the MAX and the MIN mark on the oil scale plug.

1. Set the motorcycle on the centre stand on a level surface.
2. Start the engine and run at idle for 2 to 3 minutes.
3. Switch off the engine and wait for 2 to 3 minutes. Remove the oil scale plug and clean it with a dry cloth, then insert it back in (do not screw it in) and check the oil level. The level must be between the MAX and the MIN mark.
4. When the oil level approaches or is close to the MIN mark, refill the oil to the MAX mark. Do not overfill.
5. Screw in the oil scale plug, then check for leakage.

1: Oil scale plug, 2: MAX mark, 3: MIN mark, 4: Oil screen window





SERVICE AND MAINTENANCE

! ATTENTION:

- After the engine has been running, the oil temperature is high. Exercise care to avoid injury from burning.
- If oil comes into contact with the skin, wash it away with soap or a cleaning agent.

! WARNING:

- Never fill with oil over the MAX mark.
- If oil level is below the MIN mark, do not start the engine as it may be damaged. First top up the oil and then start the engine.

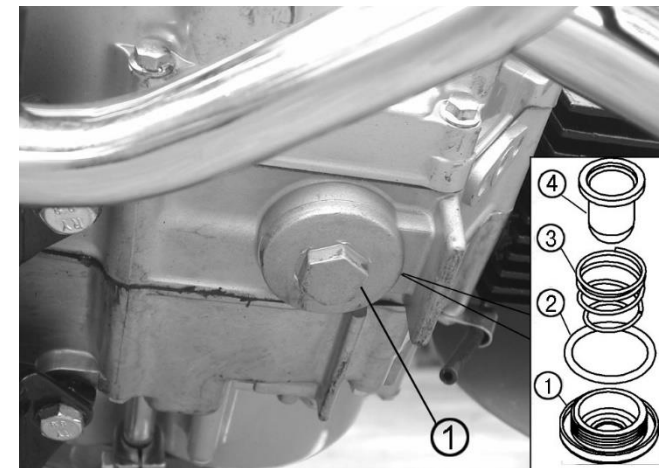
Engine oil replacement

The quality of the engine oil is the main factor that affects the life of the engine. Engine oil must be replaced at prescribed service intervals. Oil replacement must be carried out when the engine is warm, and with the motorcycle in a level position.

1. First put an empty container under the engine crankcase and then unscrew the oil scale plug.
2. Remove the drain bolt (1) under the right side of the crankcase. The seal (2), the oil screen spring (3) and the oil screen (4) will fall out and the oil will start to drain.
3. Depress the kick starter several times to drain the oil completely.
4. Retrieve the oil screen (4) and clean it.

1: Drain bolt, 2: Seal

3: Oil screen spring, 4: Oil screen





SERVICE AND MAINTENANCE

5. Inspect the drain bolt, seal, oil screen spring, oil screen and confirm that they are in good condition. Then re-assemble them as shown and tighten the drain bolt.
6. Pour 0.9L of new oil into the crankcase from the filling port and then tighten the oil scale plug.
7. Start the engine and run it at idle for several minutes.
8. Switch off the engine.
9. Inspect the oil level. Check for any leakage.

! ATTENTION:

- After the engine has been running, the oil temperature is high. Exercise care to avoid injury from burning.
- If oil comes into contact with the skin, wash it away with soap or a cleaning agent.

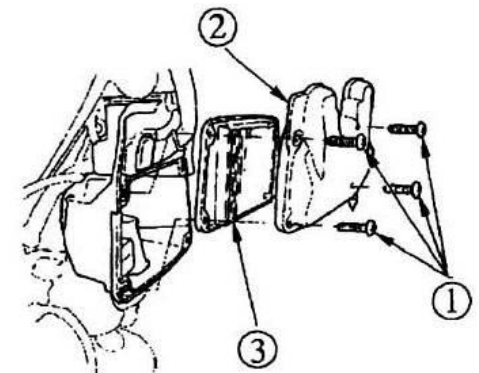
📅 NOTE:

- Used engine oil must be sent to a collecting/recycling station in a sealed container. Disposing of it in any other way will pollute the environment.

Air cleaner

The air cleaner must be maintained periodically. Especially after driving in a dusty environment, maintenance must be enhanced.

1. Remove air cleaner fixing bolts.
2. Remove air cleaner tightening bolts (1) and the cover (2). Take the filter element out (3).





SERVICE AND MAINTENANCE

3. Clean or replace filter element.
 4. Clean the air cleaner case and cover.
- Re-install the air cleaner in reverse order.

! ATTENTION:

- This model uses a sponge-type filter element. Use solvent to clean it. After cleaning, apply 2-3 drops of engine oil to it.
- If the air cleaner is not installed correctly; dust can be sucked directly into the engine cylinder. This may cause piston wear, reduce engine power and shorten the life of the engine.

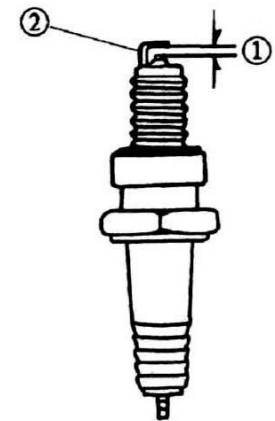
Spark Plug

Recommended spark plug for standard use: CR7HSA (NGK).

Recommended spark plug in cold temperatures (below 5°C): CR6HSA (NGK)

Spark plug inspection and replacement

1. Take the spark plug cap off and remove the plug with the spark plug wrench from the tool bag.
2. Remove the dirt around the spark plug socket.
3. Measure the gap between pole **(1)** and electrode **(2)** with a thickness gauge and adjust to 0.6 - 0.7 mm.
4. When re-installing the spark plug, screw it in by hand and then tighten with the wrench (1/2 turn for a new plug, 1/8-1/4 turn for a used one).



1: Electrode gap

2: Side electrode



SERVICE AND MAINTENANCE

5. Put on the spark plug cap.

! WARNING:

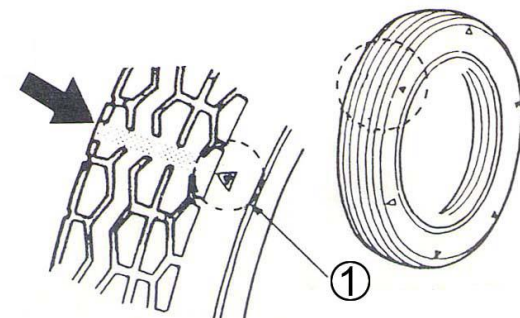
- The spark plug must be screwed in fully. Otherwise, leakage from spark plug base and temperature increase may occur resulting in engine damage.
- Do not use a spark plug with incorrect heat value; otherwise the engine could be severely damaged.

Tyres

The inflated tyre pressure must be checked daily and regulated according to the following table. Cracks, damage, and wear on the tyres cause unsteady steering or even tyre blow-out. Note that tyre pressure is measured with cold tyres.

Tyre specifications		Tyre pressure in cold state	
		Rider only	Rider and passenger
Front wheel	2.50-17	2.0 bar	2.25 bar
Rear wheel	2.75-17	2.25 bar	2.50 bar

Note: 1 bar = 1 kgf/cm² = 100 kPa



1: Wear mark

Driving with worn tyres is very dangerous. The tyres must be replaced before the tread is worn to the wear mark **(1)**. When replacing follow the manufacturer's category, dimensions and loading.



SERVICE AND MAINTENANCE

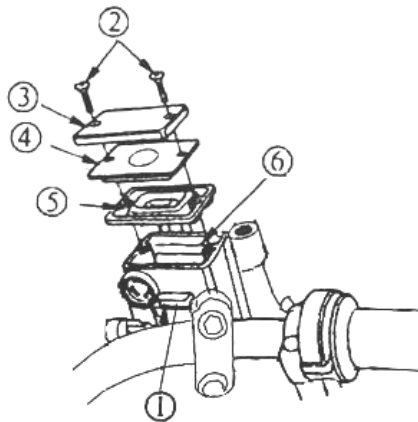
! ATTENTION:

- If tyre pressure exceeds the standard value, the tyre can easily be damaged; if tyre pressure is below the standard value, it may cause loss of control while driving or the tyre being dislodged from the rim.

Brakes

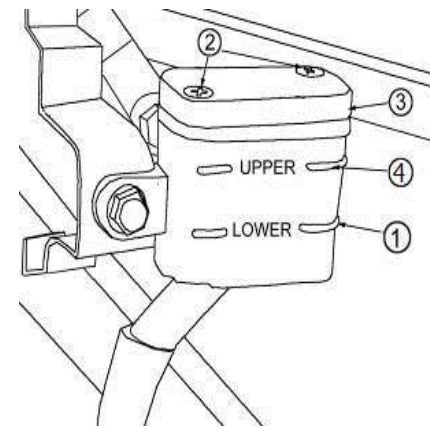
This motorcycle is equipped with hydraulic disk type front brake and rear brake. Periodic maintenance and adjustment of the braking system should be performed to prevent accidents.

- 1: MIN mark
- 2: Screw
- 3: Reservoir cap
- 4: Reservoir pad
- 5: Diaphragm
- 6: MAX mark



Front brake pump

- 1: Lower mark
- 2: Screw
- 3: Reservoir cap
- 4: Upper mark



Rear brake pump

Brake fluid inspection

Frequently scheduled inspections of hydraulic fluid level and wear condition of brake pads must be carried out.

When the hydraulic fluid level has fallen to the MIN mark, refill the fluid in the reservoir.



SERVICE AND MAINTENANCE

1. Remove the reservoir cap, pad and diaphragm for the front brake **(3, 4, 5)** or the reservoir cap **(3)** from the rear brake pump.
2. Add DOT3 or DOT4 brake fluid from a sealed closed container into the reservoir until the fluid level is at the MAX mark **(4)** or **(6)**
3. Reinstall the reservoir pad, reservoir cap and handlebar cover and tighten the screws **(2)**.

! ATTENTION:

- The brake fluid must be handled with care, as it can damage the paint surfaces and plastic parts.
- When refilling the brake fluid, make sure the reservoir is set level otherwise fluid will spill out when you remove the reservoir cap.
- Only use DOT3 or DOT4 brake fluid from a sealed container.
- Do not mix pollutants such as oil, mud or water with the brake fluid in the reservoir.
- Inspect that the fluid level is above the MIN mark, with the motorcycle in a vertical position.
- The brake fluid can cause soreness and inflammation to the skin. Do not allow it to come into contact with your skin and eyes. If contact is made with the skin, wash it thoroughly with water. If contact is made with the eyes, wash out with plenty of water and consult a doctor immediately.
- Do not mix different types of brake fluid.

Front Brake inspection

You should check the braking system for breakages and leaks before riding.

1. Press the brake lever several times to determine whether there is a leak.
2. Check the wear condition of the brake pads.

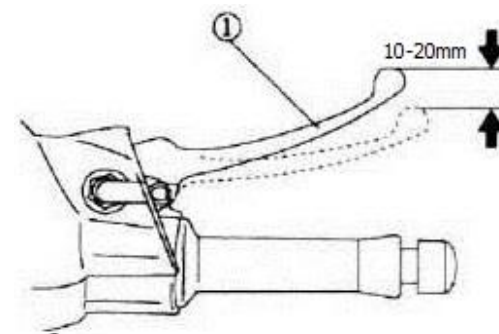


SERVICE AND MAINTENANCE

NOTE:

- Before riding with newly installed brake pads, first depress the brake lever several times to extend the brake pad fully and restore normal resistance, making the fluid circulation stable.

The free-play of the front brake lever is 10-20mm. If the free play of the brake lever is excessive (>20-30mm) and the brake pad wear is within its specified limits, air may be trapped in the braking system. It must be expelled. Take your motorcycle to an authorized Nipponia service point for brake maintenance.



1: Front brake lever

Rear brake check

The brake pedal free-play is about 20-30mm.

1. Set your motorcycle on the main stand.
2. Turn the rear wheel to check if it rotates freely.
3. Press the brake pedal several times to check if it returns smoothly to the starting position.
4. Measure the pedal free-play.
5. If the free play is beyond the recommended range it should be adjusted.

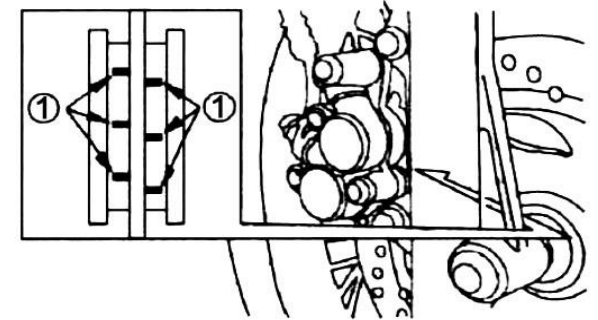


SERVICE AND MAINTENANCE

Wear condition of the brake

Wear condition of brake pads varies according to the use of the vehicle, riding style and road conditions. The brake pads may wear faster when driving on wet and dirty roads. Brake pad wear should be checked at every scheduled maintenance.

In a hydraulic brake system, the thickness of brake disk and brake pad must be checked. Check the wear mark **(1)** on each brake pad, if one of the two brake pads is worn to the wear mark, replace both pads. If the thickness of brake disk is worn to its limit (less than 3mm), the disk must be replaced at once.




1: Wear mark

Battery

This model uses a 12V-7Ah lead-acid battery. The battery will be prepared for use before you take delivery of the motorcycle.

Please note the following:

1. If the motorcycle is stored for a long time, the battery must be removed and charged fully, then stored in a cool dry place. If the battery is left on the vehicle, remove the negative cable from the battery pole.
2. When removing the battery, the ignition switch should be in “” position and the negative cable removed. When installing, connect the positive cable first, then the negative one.



SERVICE AND MAINTENANCE

3. Battery poles erode easily. Brush them clean with a needle brush then apply a film of Vaseline or grease.
4. When installing the battery, terminal bolts must be screwed tightly.

! ATTENTION:

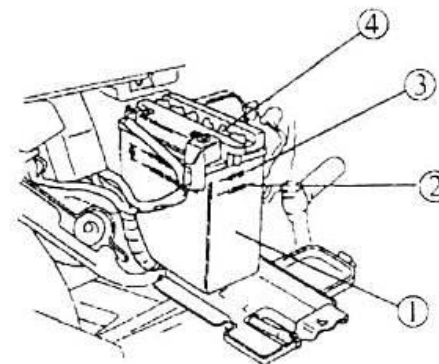
- When starting the engine, do not use the starter motor for more than 5 seconds at a time. Alternatively, the kick-starter can be used.
- When the battery requires recharging, use 0.9A charging current and 12.5V charging voltage.

! WARNING:

- The battery may produce explosive gas. Keep away from any spark or flame.
- The battery contains acid. Avoid contact with the skin or eyes. Keep away from children.

Battery removal

1. Remove the cover screw and open the battery case cover.
2. Disconnect the negative cable from the battery first, then the positive cable.
3. Take the battery out of the battery case.



- 1: Battery**
2: Min mark
3: Max mark
4: Filling ports




SERVICE AND MAINTENANCE

! ATTENTION:

- Check the level of the electrolyte every month. If the level of the electrolyte is under the min mark, then fill-in only with distilled water. Do not use electrolyte or tapped water.

Electric fuse

The fuse is located in the battery case and can withstand up to 30A.

The fuse can be rendered useless due to overloading of the electrical system or short circuiting. Switch off the main switch (turn to “” position) in advance to avoid a short circuit when replacing and/or inspecting a fuse.

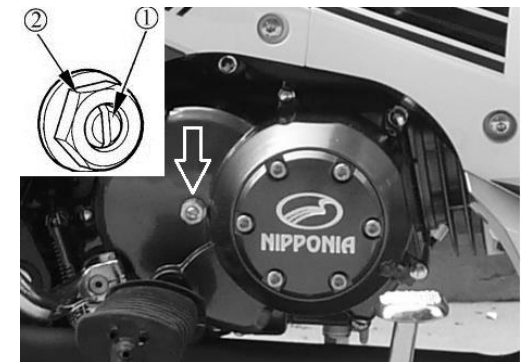
! WARNING:

- Use of fuses of rating other than specified may result in damage to the electrical system, loss of engine power or even fire.

Clutch

The adjustment of the clutch is necessary for the performance of your motorcycle. Improper adjustment causes difficulty on the gear shifting or sliding during acceleration.

1. Loose the fixing nut **(2)**
2. Turn the adjusting screw **(1)** counter-clockwise until you feel a slight resistance and then turn it clockwise 1/8 turn.



1: Adjusting screw

2: Fixing nut



SERVICE AND MAINTENANCE

3. Tighten the fixing nut, by keeping the position of the adjusting screw unchanged.
4. Test the condition of the clutch by shifting gears for several times.

If the problem still exists, you should visit an authorised Nipponia service point.

! WARNING:

- To avoid injuring do not touch the engine or the exhaust muffler when they are warm during the adjustment of the clutch.

Drive chain

The drive chain must be inspected and lubricated according to the maintenance schedule. Especially while driving in a dusty environment, maintenance must be enhanced. A worn or a wrongly adjusted drive chain (too tight or too loose) may break or come off the sprockets.

! WARNING:

- There is a great danger of engine damage or the rear wheel blocking if the drive chain breaks or comes off the sprockets.

Drive chain inspection

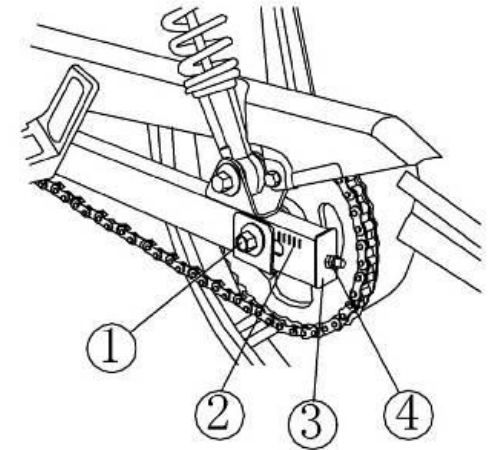
1. Set the motorcycle on the main stand in neutral gear position.
2. If the drive chain is dry, lubricate it with oil
3. Rotate the rear wheel in order to find whether the drive chain is tight.
4. Measure the free play at the centre of the drive chain. The free play should be between 10-25mm.
5. Check the wear condition of the drive chain. Replace if necessary.



SERVICE AND MAINTENANCE

Drive chain adjustment

1. Loosen the nut of the rear axle.
2. If the drive chain is loose, tighten the adjusting nut (4)
3. If the drive chain is too tight, unscrew (loosen) the adjusting nut (4)
4. You must ensure that the end of the left and the right chain adjuster are aligned with the marks of the rear fork (2).
5. Tighten the nut of the rear axle. The tightening torque is 50N·m.
6. Check the tension of the drive chain again.
7. Rotate the rear wheel and measure the free play of the drive chain.
8. Adjust again if necessary.



! WARNING:

- If the nut of the rear axle is not well tightened, driving can be extremely dangerous.

1: Rear wheel axle

2: Indicator mark

3: Chain adjuster

4: Adjusting nut

Drive chain lubrication

Use SAE90 gear oil or other suitable grease for chain lubrication. Apply on both sides of the rollers of the chain. Wipe away the additional oil from the drive chain.

! ATTENTION:

- If the drive chain is dirty, first clean it with oil and then lubricate.

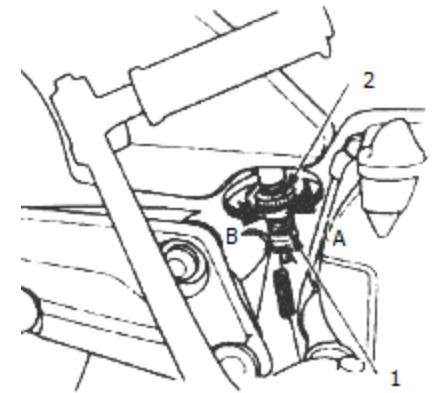


SERVICE AND MAINTENANCE

Adjustment of the rear brake light switch

The switch of the rear brake must be adjusted, in order for the brake light to come on when you press the brake pedal. The free play of the brake pedal must be adjusted before the adjustment of the brake switch.

1. Turn the ignition switch to “ON” position.
2. Turn the adjusting nut (2) in direction “A” to reduce the functioning time of the brake light and to opposite direction “B” to increase the functioning time.

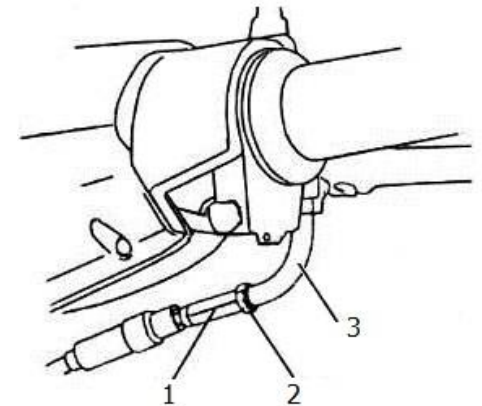


- 1: Brake light switch**
2. Adjusting nut

Throttle grip

Check the free-play of the throttle grip periodically according to the maintenance schedule (page 26). Free-play must be about 3-6mm.

1. Loosen the locking nut (2)
2. Turn the adjuster (1) until you achieve the preferred free-play.
3. Tighten the locking nut after you finish.



- 1: Adjuster**
2: Locking nut
3: Throttle cable



CARE AND STORAGE GUIDE

Long-term storage

When stored for a long time, your motorcycle must be protected against moisture, sunlight and rain. Before storing, the following steps should be taken:

1. Replace the engine oil.
2. Drain the fuel completely out of the fuel tank and fill the fuel tank with anti-rust fluid.
3. Disconnect and remove the battery and put it in a cool place.
4. After cleaning your motorcycle, apply a colour fixing or preserving agent on coloured parts and grease on moving metal parts.
5. Inflate tyres to specified pressure and then lift the motorcycle onto blocks to keep the wheels off the ground.
6. Finally, cover your motorcycle.

! WARNING:

- Fuel is flammable. When draining and refilling the fuel tank, the engine should be switched off.

Use after storage

1. Take the cover off and clean your motorcycle. If the motorcycle has been stored for more than 4 months, replace the engine oil.
2. Recharge the battery and install it.
3. Drain the anti-rust fluid from the fuel tank, then refill with fuel.
4. Pre-operation inspection should be carried out before riding (see page 18).



CARE AND STORAGE GUIDE

Cleaning

Cleaning the motorcycle periodically will help keeping the painting coat bright.

1. The motorcycle should be washed after it is stored in order to wash off the accumulated dust. The plastic parts should be cleaned with a cloth or sponge using a neutral cleaning agent.
2. After drying, let the engine run at idle for several minutes.
3. Before riding, the brakes should be inspected carefully.

! ATTENTION:

- Washing with high-pressure water may damage some parts. The following parts should not be washed in this fashion: Wheel hubs, muffler end, storage compartment, main switch and speedometer.



EFI CARE AND INSTRUCTIONS

System parts description

1. **ECU:** The ECU is the core part of EFI system. Avoid hard contact of it with any object and also excessive contact with water. Its ambient temperature should not exceed 70°C, and interference by electromagnetic fields or forces should be avoided.
2. **Fuel pump assy:** Fuel cannot be drawn out by the fuel pump if the fuel level is below the pump port. Therefore, keep the fuel level higher than the pump port. Pay attention to the fuel indicator level and always refill the tank when the level indicator reaches “E”.
3. **Throttle valve assembly:** The idling adjusting screw in the throttle valve has been pre-set following production. No adjustment should be made by the user, otherwise, engine performance will be affected.

When starting the engine, regardless of the environmental temperature, there is no need to start with an open throttle.

! ATTENTION:

- Do not attempt to disassemble the throttle valve in any way. Additionally, avoid hard contact with any object.



EFI CARE AND INSTRUCTIONS

4. **Oxygen sensor:** The oxygen sensor is a delicate component. Avoid hard contact of it with any object or surface.
5. **Temperature sensor:** The intake temperature sensor is used to monitor the fuel temperature within the cylinder.

It is one of major components used to determine the actual fuel quantity within cylinder as the fuel intensity may be affected by the variation of the fuel temperature. The intake pressure sensor measures the pressure flow through throttle body to determine the engine load. The throttle position sensors measure the throttle valve opening.

The cylinder wall temperature sensor is used to monitor the engine functioning temperature. The ECU will determine the engine control function according to the engine temperature.



EFI CARE AND INSTRUCTIONS

Service and Maintenance

1. All electrical components should be treated as fragile.
2. Additionally, strict precautions should be taken against water, oil etc. and materials that infiltrate into electrical parts and onto terminals.
3. In order to avoid damage, do not allow the battery to come into contact with the injector.
4. The EFI supplies the fuel at high pressure, even with the engine stopped, pressurized fuel may remain in the fuel system. Therefore, any fuel hose replacement must be carried out by a qualified technician in a well-ventilated area.
5. The throttle stop screw is adjusted and set during production. Do not attempt to adjust it.
6. When performing any maintenance task which causes the temperature to rise, the temperature of the ECU should not exceed 80°C
7. Before performing any welding job, the ECU must be removed from the motorcycle.
8. Do not install any equipment that may produce radio or electromagnetic interference close to the ECU.



EFI USING INSTRUCTION

Service and Maintenance

9. Whether the engine is running or not, do not remove the ECU or other sensitive parts when ignition switch is in the “ON” position.
10. When performing an ignition test, the injector connector should be disconnected to prevent starting difficulties caused by over rich fuel-mixture within the cylinder or by allowing fuel-mixture to flow into the 3-way catalytic converter twice. This may damage the catalytic converter.
11. Use of bad or old fuel should be avoided as it may damage the fuel pump jet.



EFI USING INSTRUCTION

Troubleshooting and counteractions

Symptom		Cause	Counteraction
Engine won't start or stops working.	No fuel flows out of fuel pump injector	Fuel level is too low	Refill fuel
		Pump fuel doesn't work	Check the fuse and pump relay
		No apparent cause (fuel pump works and fuel flow is sufficient)	Check for kinks in fuel hose
		Poor fuel pump contact	Check and re-insert connector
	Fuel pump works, high voltage cable works	Low battery voltage is causing low fuel pressure and low winding discharge voltage	Charge or replace battery
		Spark plug carbon deposits or wrong spark plug gaps	Clean carbon deposits or adjust spark plug gaps
		Fuel hose leaks causing reduced fuel pressure	Check fuel hose
	High voltage cable does not work	Ignition coil input "+" terminal has no voltage	Check fuse
		Poor contact of ignition coil inserts	Check ignition coil inserts
Idling speed not stable		Fuel pressure too low	Check fuel pressure
		Stepping motor seat leaks	Check the stepping motor to see whether it is tightened or not
Idling speed too high		IACV Stepping motor valve stuck	Check stepping motor seat to see whether there are impurities and motor troubles or not
No power		Fuel pressure too low	Check fuel pressure



EFI USING INSTRUCTION

Diagnostic system instructions

The diagnostic system function is to inform the driver in time when the electrical controlling system sensor or implementing unit fails. The user can perform the inspection and consequently take the motorcycle to an authorized workshop to be repaired in accordance with the display on the diagnostic system.

The diagnostic system includes the following: Faults Store; Troubleshooting; Trouble switchover strategies; Faults code display.

Faults store: When a part fails, the fault code in memory are stored in memory.

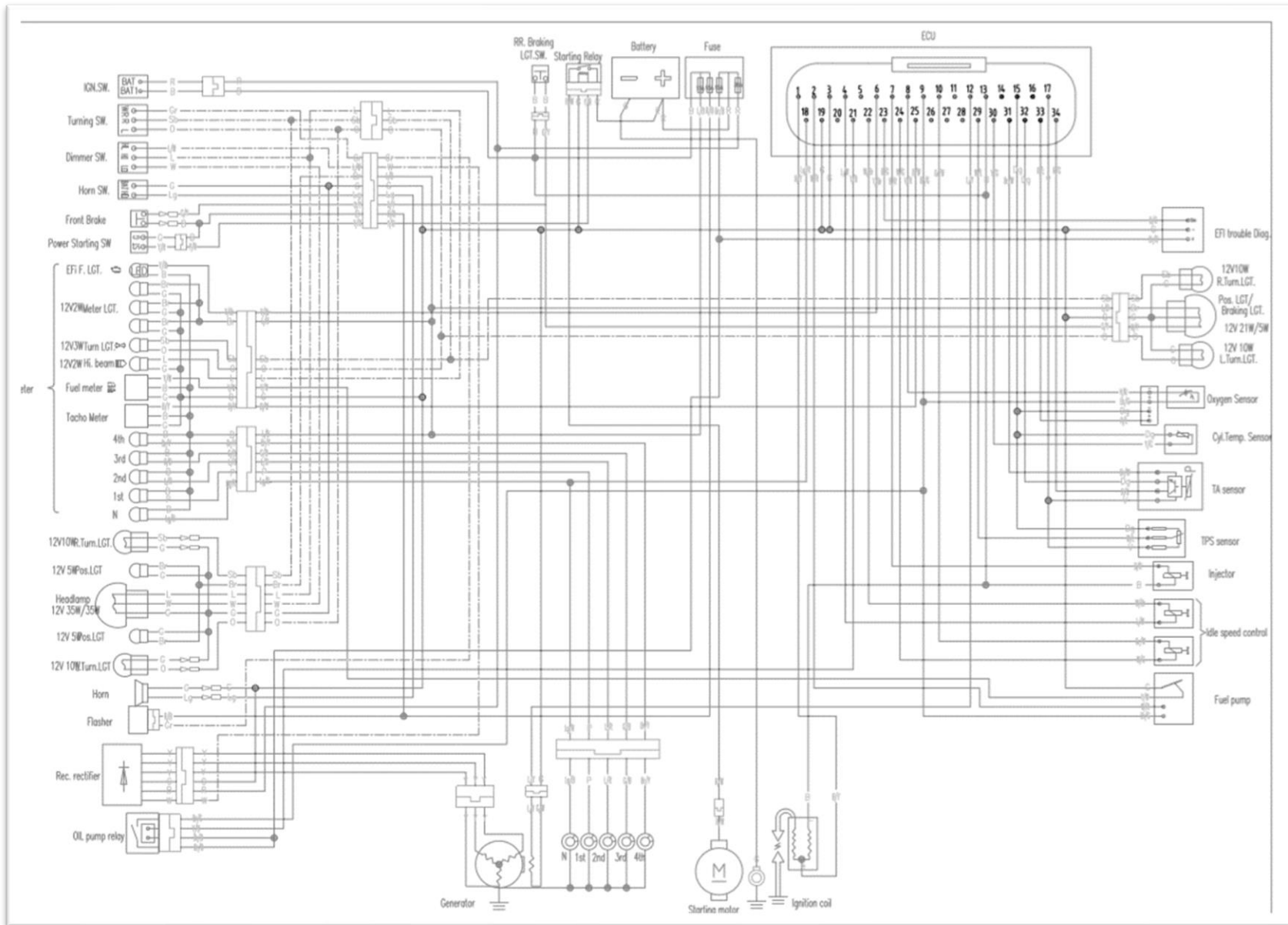
Troubleshooting: After a problem is detected, if it does not re-occur when the system is turned on 3 times, it is deleted from memory.

Trouble switchover strategies: When a sensor has failed, ECU will provide a corresponding substitute value to keep the system working (also called “limp for home”).

Faults code display: When a ECU part fails, the faults display has two functions: a trouble indicator and a diagnostic instrument (which aids the qualified technician to provide the solution). The trouble indicator flashes according to a specified pattern. The user can derive the fault according to this pattern. Additionally, you can connect the diagnostic instrument with the ECU enabling communication between these two components. Thus, the fault codes can be read from the instrument. Values of various sensors and controlling parameters are also displayed.



WIRE DIAGRAM





SPECIFICATIONS

Brio 125

Item	Data	Item	Data
Overall length (mm)	1900	Displacement (ml)	120
Overall width (mm)	720	Max Power (kW/rpm)	6.3 / 8000
Overall height (mm)	1080	Max Torque (Nm /rpm)	8.3 / 5500
Wheel base (mm)	1230	Idling speed	1500±100
Weight with oil and fuel (kg)	104	Fuel consumption (L/100km)	≤1.8
Max. load (kg) (including driver)	150	Eco Speed Fuel consumption	≤1.7
Front tyre	2.50-17	Spark plug	B8RTC
Rear tyre	2.75-17	Spark plug gap (mm)	0.6~0.7
Max Speed (km/h)	85	Engine oil capacity – replacement (L)	0.9
Climbing ability	≥18°	Fuel tank capacity (L)	3.5
Braking distance (m)	≤7 m	Valve Clearance (mm)	Intake: 0.05
Battery	12V-7Ah		Exhaust: 0.05
Fuse	1x30A 3x15A		
Ignition type	ECU		
Rated power (kW/rpm)	5.5/7500		

Note: All data obtained under laboratory conditions in accordance with relevant standards.



SERVICE SCHEDULE

The warranty can be granted only if the vehicle has been serviced in accordance with this service plan.

P.D.I.
Dealer stamp

Date:
km:-.....

1st SERVICE
Dealer stamp

Date:
km:

**Please refer to the owner’s manual for the maintenance schedule of your vehicle*

VIN:.....



SERVICE SCHEDULE

The warranty can be granted only if the vehicle has been serviced in accordance with this service plan.

2nd SERVICE
Dealer stamp

Date:
km:

3rd SERVICE
Dealer stamp

Date:
km:

**Please refer to the owner’s manual for the maintenance schedule of your vehicle*

VIN:.....



SERVICE SCHEDULE

The warranty can be granted only if the vehicle has been serviced in accordance with this service plan.

4th SERVICE
Dealer stamp

Date:
km:

5th SERVICE
Dealer stamp

Date:
km:

**Please refer to the owner’s manual for the maintenance schedule of your vehicle*

VIN:.....



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