



GAS GAS

EC ROOKIE 5

**MANUAL DEL USUARIO
SERVICE MANUAL
MANUEL D'ENTRETIEN
LIBRETTO D'USO**

GE **ECROOKIE 5**

SERVICE MANUAL



GAS GAS

PRESENTATION

GAS GAS appreciates your trust.

We are happy to see that you have decided on a GAS GAS EC ROOKIE moped and welcome you into the great family of GAS GAS users. Learn everything about your new machine. It contains a large amount of experience accumulated from many competitions where we have won important prizes. You are now the owner of a moped that, besides making you feel comfortable, offers a great many opportunities for you to show your skills while providing top safety levels.

This manual provides a wealth of basic information on the moped features and how best to use it. It also includes important safety instructions , together with basic maintenance and inspection routines.

Thank you for trusting us and welcome to GAS GAS Motorcycles.

IMPORTANT NOTICE

Read this manual thoroughly. It contains every single aspect that should help to provide safety for yourself and others, and to ensure the appropriate preservation and maintenance of the GAS GAS moped you have just purchased.

READ THE WHOLE CONTENTS OF THIS MANUAL BEFORE USING THE VEHICLE.


Important information about this manual

Specially important information is highlighted in this manual as follows:

WARNING

Ignoring the WARNING notice may result in serious or fatal injuries to the moped user, as well as to bystanders or the technicians inspecting or repairing it.

ATTENTION

This symbol identifies instructions or procedures that, unless strictly followed, may damage or destroy the equipment. 

NOTE

This symbol shows items of special interest for a better performance and a more convenient operation.

Inadequate riding may cause environmental damage and conflicts with other people. Riding your moped in a responsible manner will

prevent the appearance of such damage or conflicts.

PROTECTING THE FUTURE OF YOUR SPORT ENSURES THE LEGAL USE OF YOUR MOPED WHEN PROPER RESPECT FOR THE ENVIRONMENT AND OTHER PEOPLE'S RIGHTS IS SHOWN.

This manual includes the data and specifications available at the time of compilation. Any difference you may find with your vehicle data and specifications is a consequence of manufacturing and quality improvements. GAS GAS Motos S.A. constantly improves its vehicles so that you may enjoy them at their best.

INSTRUCTIONS FOR USE

A deep knowledge of your vehicle and how it works is extremely important.

- Remember that you are not to leave the engine running within a closed area, as the toxic exhaust fumes might have fatal consequences.
- Tyre pressure has a direct influence on the vehicle stability.
- Sudden braking may result in skidding.

Engine performance and life depend to a great extent on how it is run in. We recommend strict adherence to the instructions supplied, at the very least during the initial 500 Kms.

- Do not keep the engine running at a high-revolution level.
- Do not change down as soon as the engine starts striving.
- Do not keep the engine running at top speed for a long time.

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SPECIFICATIONS**ENGINE**

Cubic Capacity:	49,38 cc
Type:	Two-stroke single-cylinder engine with straight-into-crankcase strip admission.
Number of Cylinders:	One.
Fuel Supply:	Fuel supply by means of petrol with separate oil-lubrication pump.
Cooling System:	Liquid.
Diameter per Stroke:	40 x 39.3 mm
Carburettor:	Dell'Ortho* SMA 1412N. 14 mm-diameter diffuser with air intake through an easy-to-clean filter placed within a large filter housing.
Ignition:	Electronic with adjustable early timing.
Clutch:	Specially designed hydraulic clutch, featuring multiple steel- and friction disks fitted with springs, submerged in a highly effective oil bath.
Gearbox:	6 gears.
Transmission:	Primary, gear-operated; secondary, chain-operated.
Engine Lubrication:	Oil mixture.
Cooling:	Engine cooling is achieved through a large radiator that keeps the fluid at a constant temperature, never above 80° C.

CHASSIS:

Engine:	The radiator, secured onto a double-wedge chassis that unfolds at cylinder level, has been welded with chromolibdene and features reinforcing brackets for a highly resistant, robust assembly.
Chassis:	Deltabox, made from Cromoly rectangular tubes, aluminium rocker.
Front Suspension:	High-performance 32 mm-diameter inverted hydraulic fork. Showa* inverted fork, 160 mm stroke. - Right-hand rod: □ 175 cc SAE 5. - Left-hand rod: □ 150 cc SAE 5.
Rear Suspension:	Aluminium rocker. Progressive system fitted with BOGE* single shock absorber providing an extremely long wheel stroke. 250 mm stroke.
Front Brake:	240 mm disk fitted with 2-piston clip.
Rear Brake:	220 mm disk fitted with 4-piston clip. Wrought aluminium.

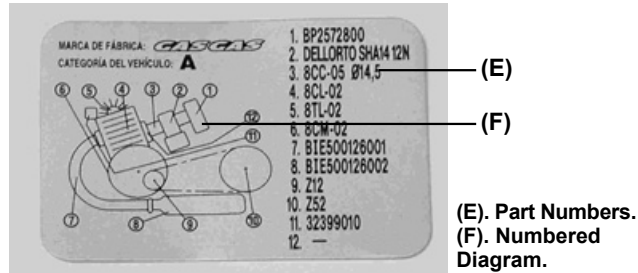
Front Tyres:	EC - 80 x 90 x 21" 48P T63 SM - 100 x 80 x 17"
Rear Tyres:	EC - 110 x 80 x 18" 58P T63 SM - 130 x 70 x 17"
Starting Pedal:	Wrought aluminium
Brake Pedal:	Wrought aluminium with retractable tip.

DIMENSIONS

Wheelbase:	1.330 mm
Saddle Height:	920 mm
Minimum Distance to Ground:	370 mm
Deadweight:	93 Kg
Tank Capacity:	8 litres. 98 NO unleaded petrol.
Oil Reservoir Capacity:	1,5 litres.
Oil Reservoir Reserve:	200 cc
Gearbox Oil:	SAE 15 - 30
Engine Output Pinion:	Z/ 12
Driving Chuck:	Z/ 52
Early Timing:	1,5 mm before PMS.
Chain:	1/2" reinforced.
Sparking Plug:	NGK BR8 ES. 0.6 – 0.7 mm electrode gap.
Air Filter:	Humid-type foam rubber.

No-tampering transfer

The moped carries an information label with a diagram illustrating some vehicle parts and their part numbers. Because these parts were included with the moped during the certification process, replacing some of them might be punished with a fine if traffic police checks the vehicle.



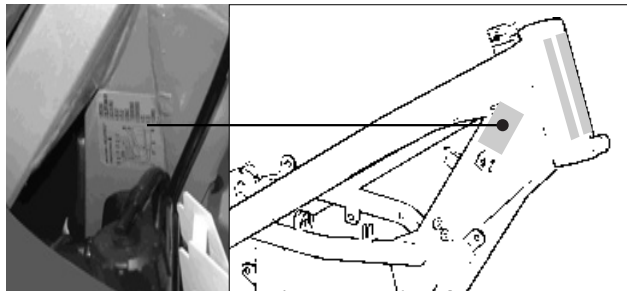
As above, again for your own information and safety, we also recommend that all of these part numbers be entered in the spaces provided. □

1.	□
2.	□
3.	□
4.	□
5.	□
6.	□
7.	□
8.	□
9.	□
10.	□
11.	□

REFERENCE

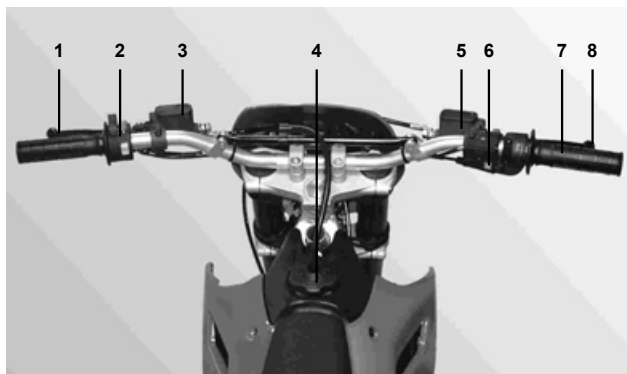
NOTE

We recommend that a specialised garage be contacted if one of these parts requires replacement. The garage will provide advice on certified spare parts.

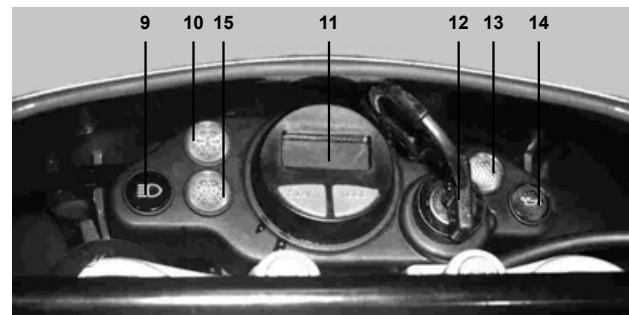


COMPONENT LOCATION

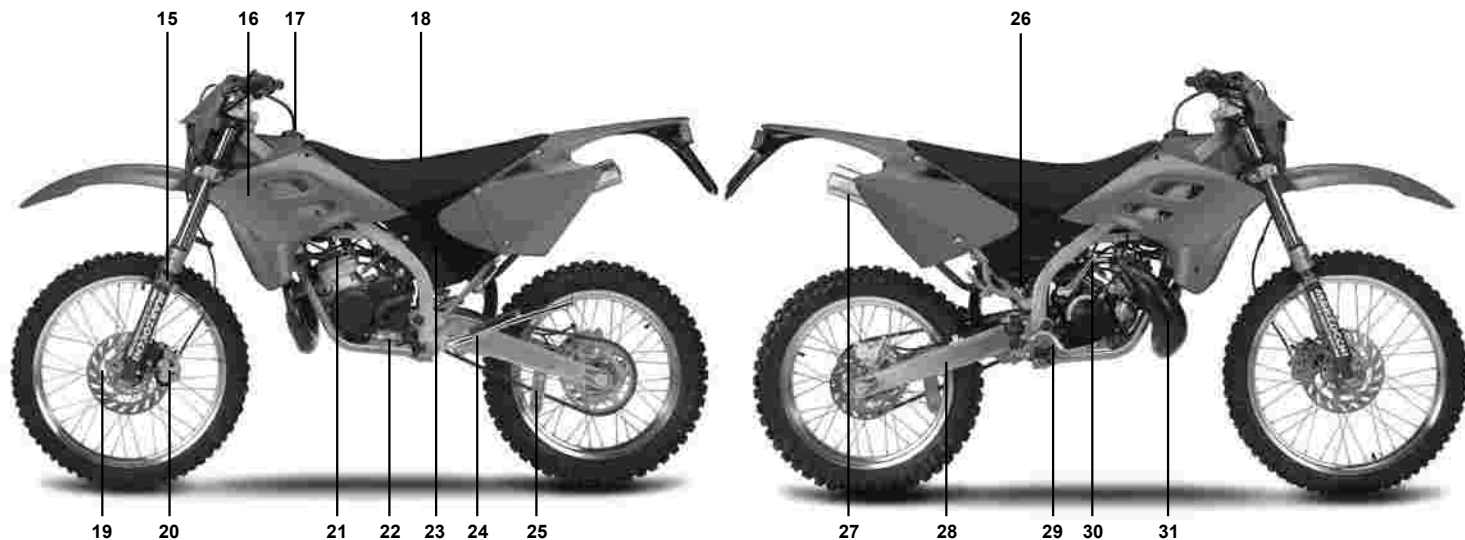
GAS GAS EC / SM ROOKIE 2005



- 1- Clutch handle
- 2- Light Switches
- 3- Clutch fluid reservoir
- 4- Petrol tank
- 5- Brake fluid reservoir
- 6- Start button
- 7- Accelerator grip
- 8- Front brake handle



- 9- Main beam pilot light
- 10- Indicator pilot light
- 11- Multifunction
- 12- Ignition key
- 13- Neutral pilot light
- 14- Oil reserve pilot light
- 15- Headlight indicator



- 15- □Front shock absorber
- 16- □Oil reservoir
- 17- □Petrol tank
- 18- □Saddle
- 19- □Front brake disk
- 20- Front brake clip
- 21- Sparking plug
- 22- Gearbox pedal
- 23- Air filter

- 24- Rack
- 25- Chain guide
- 26- Rear shock absorber
- 27- Exhaust pipe
- 28- Rocker
- 29- Rear brake
- 30- Starting pedal
- 31- Exhaust

MOPED COMPONENTS

All light controls.

(A) (B) (K) (C) (D) (E) (F)

MAIN-BEAM PILOT LIGHT (A)

This only lights up when the main beam is on.

INDICATOR PILOT LIGHT (B)

When lit, it confirms that either the left-hand or the right-hand indicator is on.

MULTIFUNCTION (C)

This provides information on speed, mileage, etc. (further details may be found at the end of this manual, under "Multifunction Instructions").

IGNITION KEY (D)

The key has been located on the front of the handlebars. To start the engine, turn the key clockwise to the "ON" position. To stop the engine, turn the key anticlockwise to the "OFF" position.

NEUTRAL PILOT LIGHT (E)

This lights up when the selector lever is in the neutral position.

OIL-RESERVE PILOT LIGHT (F)

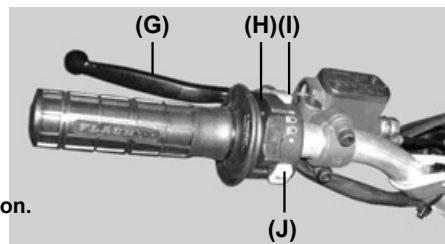
This lights up when the oil level is too low, i.e. when the reserve level is reached. At this point, approximately 1/4 of a litre of oil are left in the reservoir.

HEADLIGHT INDICATOR (K)

When lit, it indicates that the headlight is on

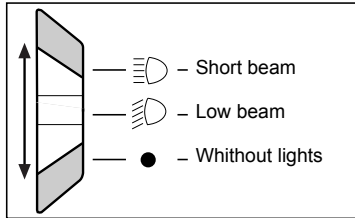
CLUTCH (G)

The clutch handle has been located on the left-hand side of the handlebars. Clutch engagement and disengagement is achieved by operating this handle. For the clutch to operate smoothly, the lever should be pressed quickly and released slowly.

LIGHTS (H)

(G). Clutch.
(H). Light button.
(I). Stopped button.
(J). Horn button.

All light controls have been located on the left-hand grip; the various positions available are reached by sliding the main switch, which is on the left end of the grip.

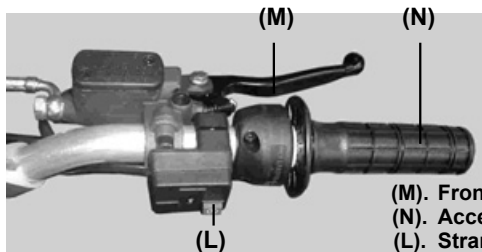


Light button diagram.

The indicator control has been located on the underside of the left-hand grip. This is an orange-colour button. To start the right-hand indicator, move this switch to the right; and likewise, to start the left-hand indicator, move this switch to the left.

START BUTTON (L)

The start button is red in colour and has been located on the inside of the right-hand grip. This is used for starting the engine. The engine is stopped by pressing the grey-coloured button (J) on the left-hand grip of the handlebars (previous illustration).



(M). Front brake.
(N). Accelerator grip.
(L). Start button.

FRONT BRAKE (M)

Front-wheel braking is achieved through a 240mm-diameter disk brake operated by a clip and a hydraulic pump. For optimum results, the braking surface must be oil-free and clean. If, for any reason, the brake fluid must be drained and replaced, read the "Maintenance" section beforehand.

ACCELERATOR GRIP (N)

Make sure that this works properly by turning the grip to see if it has the right free play. The grip must spring back to its original position when the accelerator is released.

WARNING
Improper operation of the accelerator may impair your efforts to increase or reduce speed when required. This may result in an accident. Check the accelerator before starting the engine. If the accelerator does not work smoothly, find out the reason. Solve the problem before using the moped, or contact a specialised garage.

PETROL TANK

This holds 8 litres. To access the tank, unscrew the filler cap. Once open, fill up the tank and replace the cap correctly by turning it anticlockwise.

Recommended Petrol

Use unleaded petrol with an octane rating equal to or higher than the one shown in the chart.

WARNING

Petrol is extremely flammable and may become explosive under certain conditions. Never keep the engine running or smoke when refuelling. Make sure that the area is properly ventilated and free from flammable materials or sparks; this includes the operation of any light sources.

OCTANE RATING METHOD	MINIMUM RATING
Antiknock Index (RON + MON)/2	90
Research Octane No. (RON)	98

OIL

This engine is designed to burn a mixture of combustible fuels, lead-free petrol and oil.

The mixing is performed automatically by a mechanical pump. The only precaution it is necessary to take is that of maintaining an optimum level of fuel in the oil tank.

Recommended oil:

2T SINTETIC

GASGAS
RECOMIENDA EL USO DE ACEITE:

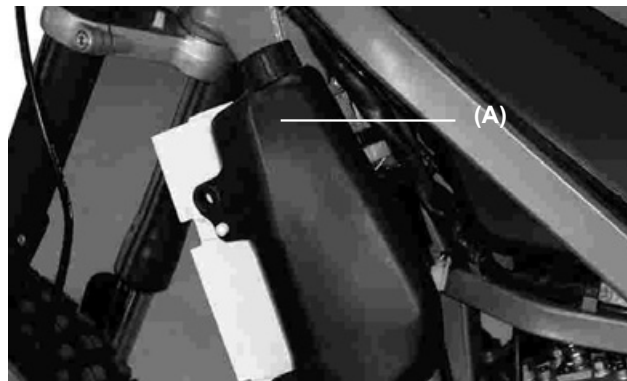


ATTENTION

Never mix vegetal and mineral oils together. Too much oil may cause an excessive amount of fumes and spark-plug dirt. Too little oil may cause engine damage or early wear.

OIL RESERVOIR

This holds 1.65 litres. It has been placed in the left of the moped, behind of the left radiator. To access the reservoir, unscrew the filler cap and fill with oil. Never allow it to exhaust the oil contents, as this would require draining the oil pump to eliminate air accumulations.

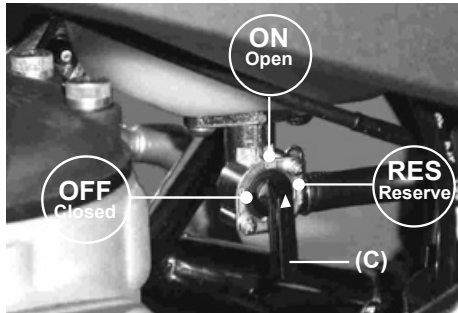


(A). Oil tank.

FUEL TAP

This tap supplies fuel to the carburettor and has been located on the left-hand side, under the saddle. The tap has three positions.

OFF: No fuel flows through the system when the lever is in this position. Always turn the lever to this position when the engine is not running.



ON: Fuel flows into the carburettor when the lever is in this position. Normal operation of the moped is achieved with the lever in this position.

RES: This refers to the fuel reserve. If you should run out of fuel on the road, turn the lever to this position.

ATTENTION

If you must use the reserve, remember to fill the tank as soon as possible!

After refuelling, turn the fuel-tap lever **(C)** back to the “ON” position.

SADDLE

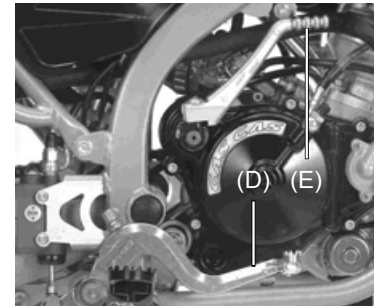
This has been joined to the chassis by means of a screw secured to the tank and its housing in the saddle tongue. The rear section is also secured with screws that must be tightened through the top of the number plates.

STARTING PEDAL (E)

The pedal has been placed on the right-hand side of the moped and is in the off-position; pull to place it in the on-position. The moped features two starting options: A button and a pedal. Use the pedal only if absolutely necessary.

REAR BRAKE PEDAL (D)

The rear brake pedal is located on the right side of the lower chassis. Activate it to apply the brake to the rear wheels.

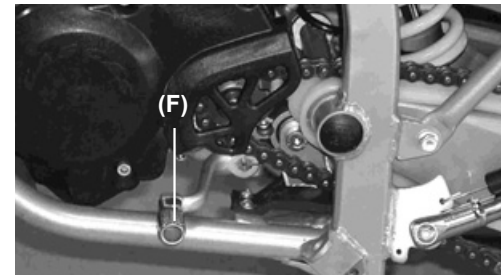


(D). Rear brake pedal.
(E). Starting pedal.

GEAR PEDAL

The vehicle features a 6-speed gearbox.

The change pedal is located on the left side of the engine and is used in combination with the clutch when changing gears.



(F). Gear pedal.

STARTING THE CYCLE

STARTING THE ENGINE

- Make sure that the moped is in neutral (this is shown on the control panel).
- Check to see that there is fuel in the tank.
- Turn the fuel tap to the "ON" position.
- Turn the ignition key clockwise (to the "ON" position), in order to open the electric circuits required for the engine to start.
- If the engine is cold, operate the choke by lifting the lever on the right-hand side of the carburettor (as illustrated on this page). This should provide a richer fuel mixture.
- Without operating the accelerator grip, press the electric starting button.
- If the engine still fails to start properly, you may also operate the starting lever.

STOPPING THE ENGINE

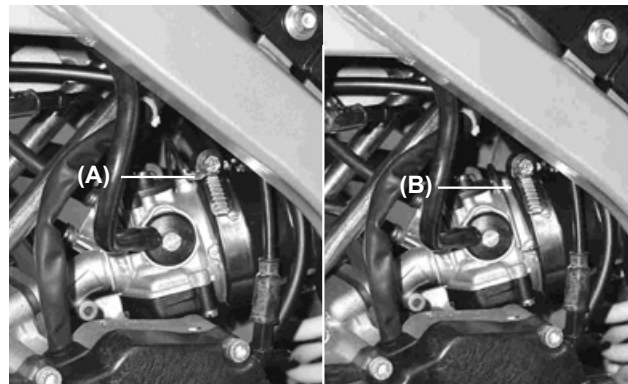
- Change down to neutral (the relevant control-panel pilot light will come on).
- Accelerate slightly, and then turn off the supply of fuel and press the stop button.
- Turn the key anticlockwise. The key will lodge to the left, a position where all the electric circuits remain closed. The engine will not start.
- You will be able to remove the ignition key.
- Finally, turn the fuel tap to the "OFF" position.

NOTE

Unless the engine is started when the ignition key is on the "ON" position, the battery may lose some power.

CHOKE

The choke is a device that increases the supply of fuel to a given extent, without the need to operate the accelerator grip, in order to help the operation of a cold engine. The engine will quickly reach its optimum working temperature with no danger to its component parts.



To use the choke, lift the lever on the left-hand side of the carburettor (A). This will allow the engine to start on reaching a given amount of revolutions.

Turn off the choke (B) after a few seconds, as the engine will have then reached the right temperature. To turn off the choke, just turn the accelerator grip as far as it will go.

NOTE

If the engine should flood, start the moped with the accelerator fully on. The moped may be started with one gear in, if you press the clutch.

GEAR BOX

This being a six-gear transmission with a return gear, shifting from first to third gear requires going through second gear, i.e. shifting gears upwards in a sequence.

To go into first gear from neutral it is imperative to press the clutch, then step on the gearbox pedal, release the gearbox pedal and finally release the clutch slowly.

ATTENTION
When shifting gears, press firmly on the gearbox pedal in order to ensure a positive shift. Incomplete gear shifting may cause the transmission to go into the wrong gear, thus damaging the engine.

STOPPING THE MOPED

For maximum deceleration, release the accelerator grip and operate both the front and rear brakes. Release the clutch and the moped will gradually stop. A separate use of either the front or the rear brake may be advantageous under certain conditions.

Change down sequentially while decelerating, to ensure the right response from the engine when you wish to accelerate.

ADJUSTMENT

The smooth operation required to maximize engine and transmission performance must be achieved through a previous running-in process. During the first hour or 20 Km, have the engine running at low speed and a moderate rpm level.

NOTE

Low speed during the running-in process may result in a dirty sparking plug. Check the condition of the standard sparking plug supplied and replace it, if necessary, with one of a higher thermal grade.

During the initial 10-hour period, it is advisable not to go beyond medium speed for a long time and to avoid any type of situation that might cause the engine to reach too high a temperature. However, short-time (3 to 4 seconds) accelerations cannot damage the engine; on the contrary, they are beneficial. Every acceleration sequence must be followed by a rest period, to allow the engine to remove all of the heat accumulated.

During this initial 10-hour period, it is advisable not to keep a constant speed, but to change it instead every now and then.

During the next 10-hour period (10-20), it is advisable not to go beyond 3/4 of the speed available for a long time.

ATTENTION
In any event, reckless accelerations may suffice to cause engine trouble. Be sure to always apply the skills and techniques required for a proper use of this moped.

MAINTENANCE**MAINTENANCE SCHEDULE**

After the initial 500 Km:	<ul style="list-style-type: none">- Gearbox-oil replacement after the running-in period.- Screw tightening and control adjustments.- Cooling-circuit inspection.- Brake-circuit level checking.
Every 1.000 km:	<ul style="list-style-type: none">- Electrode-gap inspection and sparking plug cleaning.- Chain adjustment, tightening and lubrication.- Brake-circuit level checking.- Cooling-circuit level checking.
Every 2.000 km:	<ul style="list-style-type: none">- Air-filter cleaning.- Spark-plug replacement.- Brake-pad wear inspection.- Engine-oil replacement.
Every 8.000 km:	<ul style="list-style-type: none">- Piston-, cylinder-head-, and exhaust-port decalcification.- Check to see that there are no obstructions in the exhaust pipe and silencer.- Check the early timing.
Maintenance after riding over dusty ground:	If dirt or particles get into the engine, this can cause wear of the pistons and rings. After using the moped, check the crank and replace it if the wear shown is excessive.
Maintenance after riding over muddy ground or in the rain:	<ol style="list-style-type: none">1. Lubricate the rocker arm and the suspension system.2. Check the chain and the wear on the crown wheel and pinion.3. Clean the pinion and crown wheel and grease them together with the chain.4. Check the cylinder piston and the crank bearings.5. Lubricate the accelerator grip and the cable.6. Clean the foam filter and the interior of the filter chamber.

BEFORE STARTING THE MOPED FOR THE FIRST TIME

It is advisable to make sure that transportation from our warehouse to its final destination has not altered the original condition of the moped.

- Check the condition of the sparking plug by removing the cap and unscrewing the plug.

Spark plug condition		
Correct	Dry and clear insulation	
Poor	White insulation	Change carburation one step higher.
Rich	Damp and black insulation	Change carburation one step lower.

- Check to see that there is oil in the oil reservoir. Before starting the engine, make sure that the oil supply reaches the right level. Upon removal of the screw, a slight tilting of the moped should suffice for the oil to issue through the oil-level hole.

- Check the clutch-fluid level and the front- and rear-brake fluid level.

ENGINE

Engine lubrication is carried out by means of the fuel, with the oil being supplied from a separate reservoir through a pump driven by the moped engine.

GEARBOX AND CLUTCH

Gearbox and clutch lubrication is achieved through the spluttering of the oil inside the crankcase. Both the gearbox and the clutch are lubricated by the same oil contained in the 500cc crankcase.

This draining operation may be carried out by removing the clutch cap or by operating the oil-drain screw.

- Draining the oil by operating the screw is easier. This should be done while the engine is still hot, in order to achieve a cleaner crankcase and to benefit from a more fluid condition of the oil that will speed up the draining operation. Remove the screw and wait for the crankcase to empty. Next, replace the screw, fill the crankcase, and use the dipstick to check that the right level has been reached. It is advisable to change the oil after the initial 500 Kms, with an oil-level check every 2500 Kms and a new change every 5000 Kms.

CARBURETTOR

This is one of the most crucial items for a proper engine performance, as it is within the carburettor that the petrol-air mixture is produced: a deficient carburation process translates into a poor performance and may damage the thermal area of the engine. Consequently, it is advisable to have the carburettor adjustment checked, ideally by an Authorized GAS GAS Dealer.

Efforts must be made to ensure that the carburettor internal components are clean and in good condition. For this purpose, periodically clean the carburettor and especially its jet by using an air jet or simply by blowing through it. Never use a wire to clean the carburettor, as this might alter the bore and affect the engine negatively. Yet another cause of carburettor malfunctioning may be a blocked fuel-intake filter. Remove the screw securing the intake adapter, clean the filter if it is dirty, and replace it carefully to avoid damaging its filtering cloth.

AIR FILTER

The adequate performance and durability of the various engine components (connecting rod, piston, piston rings, crank bearings, even the cylinder) depend to a great extent on the air filter being clean and properly lubricated.

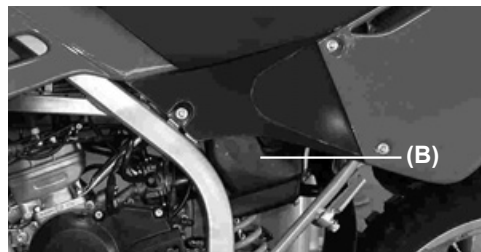


(A). Air filter box.

WARNING

Always clean the filter in an area that is properly ventilated and free from sparks or flames in the vicinity (this includes any powerful light sources). Do not use petrol to clean the filter, as this might cause an explosion.

To access the filter, remove the cap on the filter-housing, which has been placed on the left-hand side of the moped.



(B). Air box situation.

Upon removal of the cap, check the condition of the filter housing, wash the filter if it is dirty, and then lubricate it. To lubricate the filter, apply a few drops of oil to soak the foam and press it with one hand without twisting it, then make sure to replace it correctly in its housing; otherwise, unfiltered air might reach the carburettor and cause serious damage to the moped.

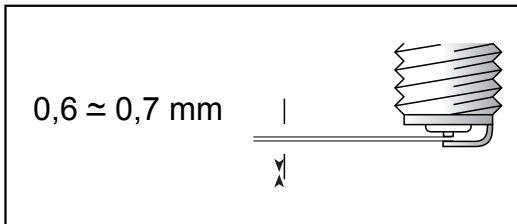
SPARKING-PLUG CHECK



(C). Spark plug removed from the valve cover.

The proper working of the engine depends on the good condition of the sparking plug; therefore, this is an extremely important component that can be easily inspected. Disassemble and check the sparking plug periodically. For instance, if the central-electrode porcelain insulation appears to be too white, this might be due to a leak in the carburettor air-intake tube, or to carburettor damage or malfunction. The high temperatures the electrode is subjected to, together with carbon deposits, result in excessive wear and eventually render it useless. When this stage is reached, replace the sparking plug with a new one of the same type and recommended thermal grade (NGK BR 8 ES), or any other brand of a similar thermal grade.

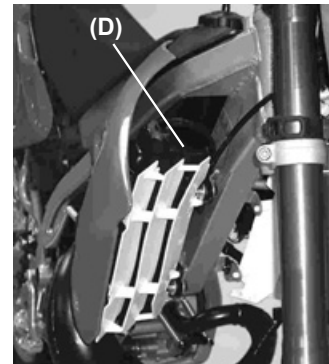
Carburettors must always be checked by an authorized GAS GAS dealer.



Remove the dirt on the thread and clean the gasket seating, in order to prevent any foreign matter from entering the combustion chamber. Sparking-plug replacement requires checking to see that the electrode gap remains between 0.6 and 0.7 mm.

RADIATOR (D)

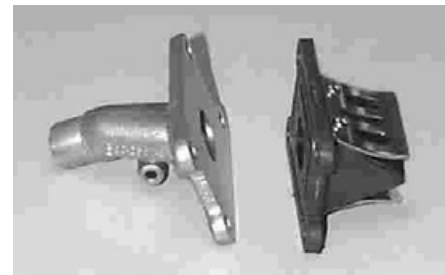
The radiator, which reduces the temperature of the engine-cooling water, has been secured with silent blocks under the petrol tank.



The only precaution to bear in mind is that of ensuring that it is completely full of liquid, since, in this way, the water is guaranteed to complete the whole circuit. The use of closed circuit antifreeze liquid is strongly recommended. In this way the you avoid the freezing of the water with the attendant risks engine seizures or breakages of the pump blades.

STRIP BOX

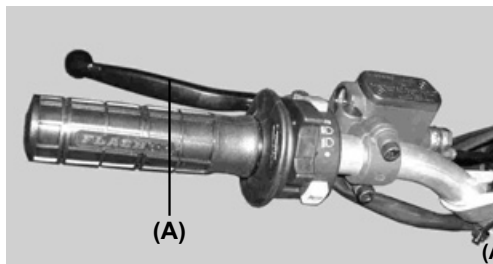
In order to enhance its performance, this engine has been fitted with strip admission. These strips are extremely fragile. Because of their fragility, the strips must not be tampered with, either by opening or by folding them, as this would result in engine malfunction and in the invalidation of the dealer's guarantee.



Strip box.

CLUTCH ADJUSTMENT

Clutch adjustment may be carried out by means of the tightening device supplied with the handle. This is achieved by tightening or loosening the tightening screw, as required. The handle should have a 4-5 mm clearance. Due to its hydraulic action, the clutch assembly requires no handle-clearance adjustments.



(A). Clutch.

CHAIN LUBRICATION

The chain should be cleaned and checked periodically. To achieve this, remove the chain while keeping the hook at one of its ends, which will both confirm its previous position and avoid the risk of losing it. Clean the chain thoroughly with a metal brush, by submerging it in a petrol bath and shaking it until all of its links are clean and free from obstructions. Submerge it again in clean petrol or gas oil, rinse and allow it to dry for a few minutes. Lubricate and reassemble it, always making sure that the hook is placed in the opposite direction to the chain movement. It is most advisable to lubricate the chain every 100 or 200 Kms with special chain-lubrication oil.



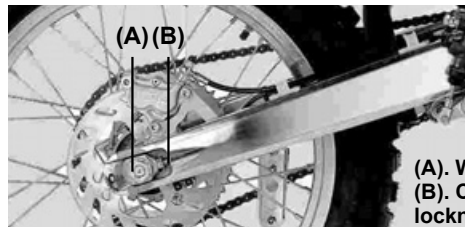
Chain lubrication.

CHAIN TIGHTENING

Tightening and aligning the chain is easily achieved by loosening the nuts on the wheel axle (A) and by turning the nuts on the chain tighteners (B) as required, until the right chain tension or sag is achieved, together with a proper wheel centering and alignment.

WARNING

Always try to achieve a proper chain-and-wheel alignment, as otherwise the chain might come off and hit and damage the crankcase.



(A). Wheel axle nut.
(B). Chain adjuster locknuts.

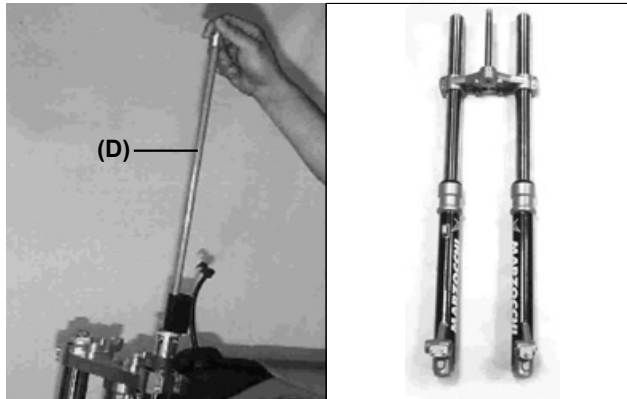
FRONT SUSPENSION

The front suspension, featuring state-of-the-art technology and design, includes an inverted hydraulic fork with 32mm-diameter rods. Each rod has its own purpose and effect, as, whilst one of them acts mechanically through compression springs, the other one only operates hydraulically.

Oil supply per rod

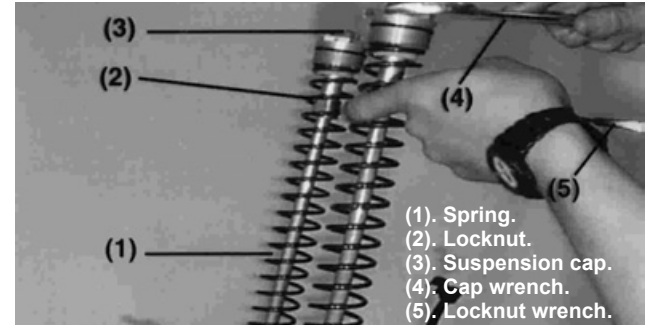
- Right-hand fork...175 cc.
- Left-hand fork.....150 cc.

Hydraulic oil SAE 5



- Pull the hydraulic-system rod (D) slowly.
- The fork oil will now issue through the hole in the hydraulic-system rod; keep it raised until it stops.
- Insert the suspension spring (1) into the fork tube.

- Press the suspension spring and insert the key (5) into the locknut (2) locking the cap (3).
- Fit the suspension cap onto the fork rod and tighten to 29 N-m.
- Fit the other fork.
- Fit the disassembled components.



- (1). Spring.
- (2). Locknut.
- (3). Suspension cap.
- (4). Cap wrench.
- (5). Locknut wrench.

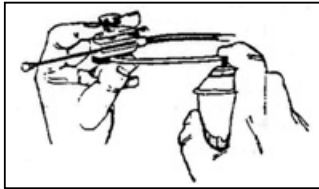
REAR SUSPENSION



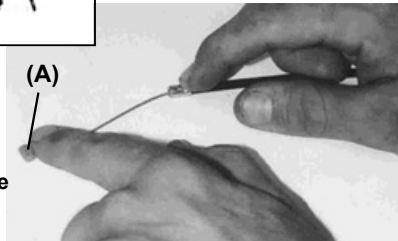
The rear suspension, which is of the swivelling type and features a hydraulic shock absorber, requires no more attention than checking its wear and the play on the swivelling arm. Should the silent blocks securing the shock absorber loose their shape, for any reason whatsoever, replace the shock absorber to prevent damaging the chassis geometry.

CABLE

The accelerator cable should always be in perfect condition; therefore, whenever the slightest crack is detected, it must be replaced immediately. However, in order to extend its life and enhance its operation, it should be lubricated approximately every 1000 Kms. Do this by inserting a few drops of SAE-20 between the cable and its guide.



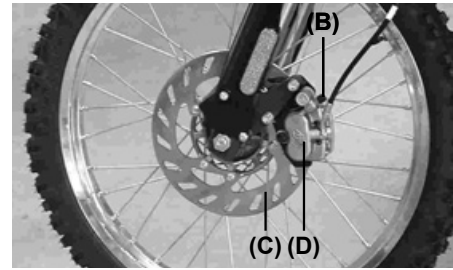
Use an aerosol cable lubricant with a pressure luber:



Apply grease to the following point throttle inner cable upper ends (A).

FRONT BRAKE

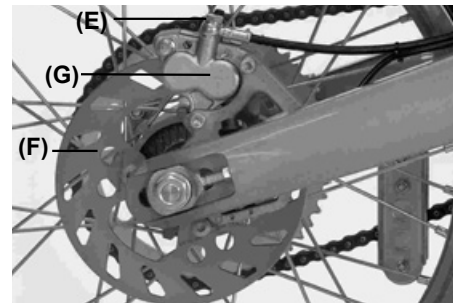
Front-wheel braking is achieved through a 240mm-diameter disk brake operated by a clip and a hydraulic pump. For optimum results, the braking surface must be oil-free and clean. If, for any reason, the brake fluid must be drained and replaced, proceed as follows:



**(B). Bleeder screw.
(C). Disk brake.
(D). Brake caliper.**

Remove the pump cap and pour brake fluid to just under the top level. Next, loosen the bleeder and insert a tube in it. The tube end should be inserted in a container to avoid fluid spilling. After filling the pump and loosening the bleeder, operate the brake handle until the fluid drops, making sure that no bubbles come out through the inserted tube. Then, turn off the bleeder and pour brake fluid into the reservoir to reach the mid-level mark. Replace the cap and operate until the braking is perfect.

REAR BRAKE



**(E). Bleeder screw.
(F). Disk brake.
(G). Brake caliper.**

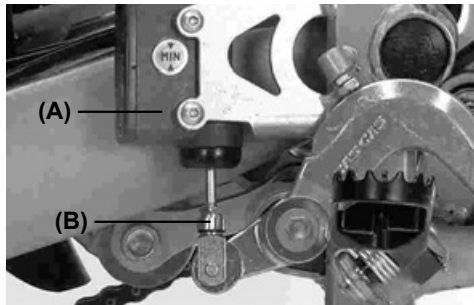
Rear-wheel braking is achieved through a foot-operated lever and a 220mm-diameter disk brake. It is very important that the fluid-pump piston push rod has some play with the piston, as otherwise an excessively hot fluid would cause it to expand and might block the wheel, with serious consequences for the user.

PUMP AND BRAKE PADS

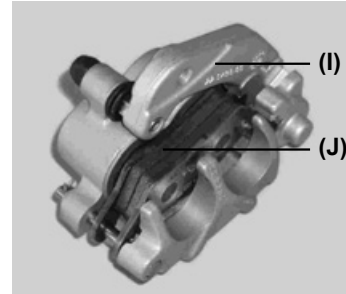
Make sure that both brakes have the right amount of brake fluid, and refill if required. Replace any worn brake pads on the hydraulic clips.

Minimum pad thickness: 2mm

Below this level, they still work correctly. However, besides the risk of defective braking, when this is required, the braking surface of the disk might also be seriously damaged. Remember that these operations should always be carried out by a specialised garage.



**(A). Break pump.
(B). Rear brake pedal adjustment rod.**



**(I). Brake caliper.
(J). Pad.**

STEERING

The steering of a properly tuned up moped must turn easily; therefore, if the steering feels hard or works erratically, this may be due to either excessive tightening or defective condition of the ball race or of the ball-bearing balls. Should the latter be the cause of the problem, disassemble and replace the ball races and the steel balls. Remember that the steering should always turn smoothly and must never have any play.

TYRE PRESSURE

The EC Rookie features two wheels of different sizes and pressures:□

- Front wheel:** □ 80 x 90 x 21" □□
With 1 passenger: 1 Bar □□
With 2 passengers: 1,5 Bar □
- Rear wheel:** □ 110 x 80 x 18" □□
With 1 passenger: 1,2 Bar □□
With 2 passengers: 1,7 Bar

CHECKING OPERATIONS AT SPECIALISED GARAGES

MAINTENANCE OPERATIONS	1° CHECKING	2° CHECKING	3° CHECKING
	1.000 Km	3.000 Km	5.000 Km
Checking brake systems	✓	✓	✓
Checking transmission oil level	Change	✓	Change
Checking chain tightening and wear	✓	✓	✓
Checking suspension systems	✓	-	✓
Checking, adjusting & lubr. controls and cables	✓	✓	✓
Tightening spokes	✓	-	✓
Checking filter and carburettor (cleaning)	✓	✓	✓
Check and adjust the spark plug electrode.	✓	-	✓
Checking chassis screws and nuts (plastics)	✓	-	✓
Checking brake- and clutch-fluid levels	✓	✓	✓
Checking braking-pad wear	-	-	✓
Checking electric system	✓	-	✓
Checking piston-ring wear	-	-	✓
Checking radiator water levels	✓	✓	✓

STORAGE

Proceed as follows, before storing the moped for some time:

- Clean the moped thoroughly.
- Start the engine and keep it running for approximately 5 minutes to heat the transmission oil, then drain it (see the Transmission section).
- Refill with new oil.
- Drain the petrol tank (if left in the tank for a long time, petrol loses quality).
- Disconnect the battery.
- Lubricate the chain and all the cables.
- Apply oil on all non-sprayed metal surfaces to prevent rust, but not on the brakes or rubber parts.
- Wrap the outside of the exhaust pipe in a plastic bag to prevent rust.
- Place the moped in such a way as to avoid contact of the wheels with the ground (if this is not possible, place some cardboard under the wheels).
- Cover the moped to avoid dust and dirt.

Starting the moped after a period in storage:

- Remove the plastic bag from the exhaust pipe.
- Tighten the sparking plug.
- Fill the petrol tank.
- Check the steps set forth in the section entitled "Inspection prior to using the moped".
- General lubrication.
- Connect the battery.
- Check tyre pressure.

FINAL THINKS

PREVENTIVE ADVICE

Periodic maintenance and thorough checking of every function before starting the moped. Periodic checking operations of this moped must only be carried out by GAS GAS After-Sales specialists.

SAFE USE OF THIS MOPED

Safe use of a moped does not only depend on the vehicle. Here, the rider's common sense and intelligence play a crucial role. Therefore, we recommend that you wear the required gear (helmet, boots, etc.) to practise your favourite sport.

In the interest of technical development, we reserve the right to modify the construction, standard equipment and accessories of this moped. Data concerning measurements, weights and power includes the relevant tolerances.

Depending on the equipment and accessories included with this moped, as well as on the various versions designed for world markets, there may be differences between this vehicle and the descriptions and illustrations supplied. Because of this, errors and omissions excepted, no claims will be accepted in this connection.

GAS GAS MOTOS, S.A. reserves the right to introduce changes and / or modifications without prior warning.

EVENTS ON THE ROAD

If the engine works normally, it should start with no difficulties. Should the engine fail to start after repeated attempts, check to see whether the problem is with the carburettor or with the ignition.

CARBURETTOR PROBLEMS

- The engine is cold.
- There is no petrol in the tank.
- The petrol tap is off.
- The petrol-cap hole (breather) is obstructed.
- There is an obstruction between the petrol tank and the carburettor tap.
- Partial breakage of one or more of the reeds in the reed valve assembly or their opening.

IGNITION PROBLEMS

- Check to see that the sparking plug is clean and the electrode gap is correct.
- Make sure that the sparking plug is producing sparks; to do this, bring the sparking plug (connected to the tube) closer to the fins or outside area of the cylinder, then kick the starting pedal.
- Make sure that the sparking-plug tube is properly connected.
- If the sparking plug fails to produce sparks, replace it with a new one and check again.

Should the moped still fail to start after the above checking operations, there may be a mechanical problem. Have it checked by an authorised GAS GAS Dealer.

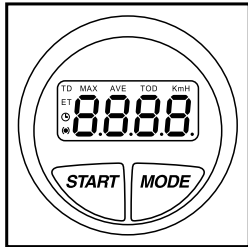
GAS GAS MOTOS, S.A. recommends the use of the following products for its EC ROOKIE 50 cc model.

UTILISATION	TYPE
Gear oil	SAE 15 - 30
Engine pump oil	2T sintetic

REMARK:

MULTIFUNCTION

Functions



- Work mode. This can be activated (ON) and deactivated (OFF).
- Clock. Indicates hour and minutes.
- Chronometer. Indicates the time passed since the last activation of the work mode. □
- Partial distance. Indicates the distance covered since the last activation of the work mode.
- Maximum speed obtained since the last activation of the work mode.
- Average speed during the last activation of the work mode.
- Total distance covered since the equipment was turned on.
- Instantaneous speed.

NOTE

In order to select any of the functions, the motor must remain stopped for ten seconds. A minute after selecting a function, the screen will turn off automatically. It is activated again by pressing the MODE key or putting on the motor.

Work mode

This option is selected by means of the MODE key. By pressing START it goes from the deactivated state (OFF) to the activated state (ON) and viceversa.

When it is in the activated mode, the symbol (●) is visualised permanently on the screen. The gathering of data then begins and the calculations are carried out to obtain the information which is visualised in the function Chronometer, partial Distance, maximum Speed and average Speed.

When OFF is pressed, the adquisition of data and the calculations are detained, but the calculated values are not lost, and can be visualised by selecting the corresponding function. By activating once more the work mode (ON), the values previously stored are wiped out.

Chronometer

The chronometer visualises the time passed since the last activation of the work mode. Initially, minutes and seconds are visualised. After an hour has passed, hours and minutes are visualised.

Maximum speed

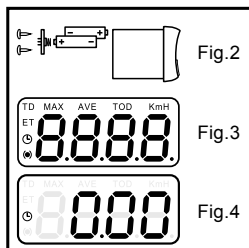
This shows the maximum speed reached during the activated work mode.

Average speed

This shows the average speed reached during the activated work mode.

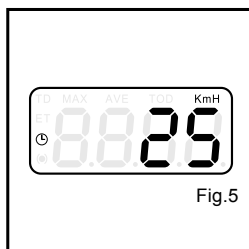
Total distance

This visualises the total distance covered since the moment when the equipment was turned on for the first time. The value accumulated is maintained permanently, even without batteries, and is independent of the condition of the work mode.



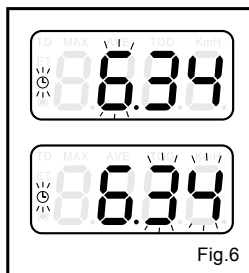
Installation of batteries

- To replace the batteries, remove the cover of the battery space by unscrewing the two screws at the back of the multi-function.
- Substitute the old batteries with the new ones, maintaining the same polarity which is indicated on the diagram.
- Finally, screw on the cover again. (Fig. 2)
- If the previous process has been carried out correctly, all the segments and legends of the screen will appear momentarily. (Fig. 3). After a few seconds, the clock symbol will appear with a reading of zeros (Fig. 4), disappearing after 10 seconds.



Instantaneous speed

On turning on the motor, the reading of Km/h. will appear automatically. While the motor is in operation, the instantaneous speed reading will remain on the screen (Fig. 5). On detaining the motor, the screen will remain lit up for about ten seconds with the indication of zero Km/h. After this time, if the motor is not turned on again, the last function previously selected will appear on the screen. The screen will turn off completely after one minute, if during this time the power has not been turned on again or if a function has been selected. While this function is visualised, it is not possible to select any other one.



Setting the time

Press the MODE key until the clock symbol appears. By pressing the START key, the minute digits and the clock symbol will flash, indicating that it is in time set mode (Fig. 6).

By pressing lightly on the START key, the minutes indicator will be advanced. On keeping the same key pressed, the advance will be automatic, being detained on letting go of the key. On pressing the MODE key, the hour digits will flash, proceeding in the same way as above. Once the correct values have been selected, press the MODE key to give said values. The digits will stop flashing.

WARRANTY TERMS AND CONDITIONS

(According to Law decree 23/2003 on the 10th of July, covering Warranties on Consumer Item Sales)

Warranty terms of the manufacturer **GAS GAS Motos, S.A.**

The company GAS GAS MOTOS, S.A. (hereafter referred to as "GG"), with this present document guarantees the consumer, the purchaser of a vehicle manufactured by GG, that both the materials and the manufacturing are free of defects in accordance with the highest standards of quality. Consequently, GG with this document guarantees the consumer (hereafter referred to as the "purchaser"), in accordance with the conditions set out below, the repair, free of charge, of any defect in materials or that might result from faulty manufacture that is detected in a new motorcycle within the period covered by this Warranty and with no limit on the number of kilometres covered or hours of use.

Warranty Period

The period covered by this Warranty will begin on the day of delivery of the vehicle to the purchaser by a GG authorised dealer, or in the case of demonstration models, on the date in which the vehicle is used for the first time.

The seller will be responsible for any unwarranted faults that become apparent within the period established in the Law decree 23/2003 on the 10th of July covering Warranties on Consumer Goods Sold from the time of delivery and in accordance with the Directive 1999/44/EC for other members of the European Community. For countries outside the European Community, the Warranty Period will be determined by the existing regulations in those countries. Nevertheless, should the fault appear during the first six months after the delivery of the motorcycle, it will be presumed that the said fault existed at the time of delivery; from the end of the sixth month onwards, the purchaser must demonstrate that the unwarranted fault existed at the moment of delivery. During the first six months subsequent to the delivery of the repaired vehicle, the seller will be

responsible for any unwarranted faults arising out of the repair. Any defects detected in the product must be brought to the attention of a GG authorised dealer within the Warranty Period. If the last day of this period is a Sunday or an official holiday, the Warranty period will be extended such that the last day of the period covered will be the first working day after the Sunday or official holiday.

Those claims under Warranty for defects not brought to the attention of a GG authorised dealer before the end of the Warranty Period will be excluded.

Obligation of the purchaser

GG will have the right to reject any claims under Warranty in the event that:

- a) The purchaser has failed to submit the vehicle to any of the inspections and/or maintenance work required in the Users' Manual, or has exceeded the date set for such inspections or maintenance work. Also excluded from guarantee are those faults that appeared prior to the dates established for an inspection or maintenance work where the latter was not carried out, or was carried out later than the date established.
- b) An inspection, maintenance or repair has been performed on the vehicle by third parties not recognised or authorised by GG.
- c) Any maintenance or repair has been carried out on the vehicle that violates the technical requirements, specifications and/or instructions indicated by the manufacturer.
- d) Spare parts whose use has not been authorised by GG have been used during the course of maintenance work or repairs to the vehicle, or in the event that the vehicle has been used with fuels, lubricants or other liquids (including, amongst others, cleaning products) that have not been expressly mentioned in the specifications set out in the User's Manual.
- e) The vehicle has been altered or modified in any way or fitted with components other than those expressly authorised by GG as accepted components of the vehicle.

- f) The vehicle has been stored or transported in a way that is not in accordance to the corresponding technical requirements.
- g) The vehicle has been used for special purposes other than ordinary use, such as competition, races or record breaking attempts.
- h) The vehicle has been directly or indirectly damaged as a result of a fall or an accident.

Warranty exclusions

The following items are not covered by this Warranty:

- a) Worn parts, including, without any limitation, spark plugs, batteries, petrol filters, oil filter elements, (secondary) chains, engine output pinions, rear sprockets, air filters, brake discs, brake pads, clutch plates and discs, bulbs, fuses, carbon brushes, footrest rubbers, tyres, inner tubes, cables and other rubber components
- b) Lubricants (for example, oil, grease, etc.) and working fluids (for example, battery liquid, coolant, etc.)
- c) Inspection, adjustments and other maintenance tasks, as well as all kinds of cleaning work
- d) Damage to the paint-work and consequent corrosion due to external causes, such as stones, salt, industrial fumes and other environmental impact, or inadequate cleaning with inappropriate products
- e) Any damages caused as a result of the defects, as well as any expenses incurred either directly or indirectly as a consequence of the defects (for example, communication costs, accommodation expenses, car hire costs, public transport costs, breakdown truck fees, courier costs, etc.), as well as other financial losses (for example, those caused by the loss of the use of the vehicle, loss of income, time lost, etc.)
- f) Any acoustic or aesthetic phenomenon that does not significantly affect the condition or use of the motorcycle (for example, small or hidden imperfections, noise or vibrations that are normal in use, etc.)
- g) Phenomena that are the result of the ageing of the vehicle (for example, discolouring of painted or metallic coated surfaces).

Various

- 1.- GG shall have the prerogative to decide, at its own discretion, whether to repair or replace defective parts. Where parts are replaced, ownership of the parts removed shall pass to GG without any other consideration. The GG authorised dealer, to whom the making good of the defects has been entrusted, is not authorised to make any declarations that are binding on GG.
- 2.- In case of doubt regarding the existence of a defect, or a visual or material inspection is required, GG reserves the right to demand the return of the parts which are the object of a claim under Warranty, or to arrange an inspection of the defect by an expert from GG. Any additional obligations arising out of guarantees on parts replaced free of charge, or any other service rendered free of charge, are excluded from the effects of this present warranty. The Warranty on parts replaced within the Warranty Period will end at the expiry date for the Warranty Period of the product concerned.
- 3.- Should it prove to be the case that a defect can not be repaired, the purchaser guaranteed shall have the right to the cancellation of the contract (payment of compensation) or a partial refund of the purchase price (discount), instead of repairing the motorcycle.
- 4.- Any claims against Warranty by the purchaser under the terms of the sale contract with the corresponding authorised dealer shall not be affected by the terms of this present Warranty. Neither will this present Warranty affect those additional contractual rights acquired by the purchaser under the general commercial terms and conditions of the authorised dealer. However, such additional rights may only be exercised through claims against the authorised dealer.
- 5.- Should the purchaser resell the product within the Warranty Period, the duration and conditions of the present Warranty will remain unaltered, in such a way as that the rights to make claims under the present Warranty in accordance with the terms and conditions set out in this present document shall be transferred to the new owner of the motorcycle.
- 6.- In the case of used motorcycles sold by Gas Gas the Warranty Period will be one year from date of delivery of the goods. And in no case shall the consumer request replacement of the goods.

GASGAS

RECOMIENDA EL USO DE ACEITE:
RECOMMENDS THE USE OF:
RECOMMANDE L'USAGE DE L'HUILE:
CONSIGLIA L'USO D'OLIO:



GASGAS

FEBRERO / FEBRUARY / FEBRER 2005



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C/ UNICEF nº 17 · Poligon Industrial Torremirona · 17190 Salt (Girona) SPAIN · Tel: +34 902 47 62 54 Fax: +34 902 47 61 60
E-mail: officegg@gasgasmotos.es / partsgg@gasgasmotos.es