



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

# USER MANUAL



#### INTRODUCTION

GAS GAS thanks you for the trust you have placed in us.

By choosing the new WILD H.P. 450 you have just joined the great GAS GAS family and, as a user of the number one off-road motorbike manufacturer, you deserve the special treatment we wish to offer you, both in our after-sales relations and in the explications offered in this manual.

Our WILD H.P. is a sporting quad bike designed by and for competition. With it you can enjoy the high degree of technical perfection and reliability, in addition to the careful design and high performance.

This manual provides you with a good basic knowledge of the features and handling of the machine. It also contains important instructions concerning safety and offers information about the special techniques and skills required to drive the machine, in addition to the basic maintenance and inspection procedures.

Thank you for your confidence and welcome to GAS GAS motos SA.

#### GENERAL ADVICE

Read this Manual carefully. It explains all the aspects concerning your safety and that of third parties, in addition to ensuring the correct care and maintenance of the GAS GAS quad bike which you have just purchased.

PLEASE READ ALL THE MANUAL BEFORE USING THE MACHINE.

#### Important information about this manual

Information of special note is marked in the manual using the following notations:

#### WARNING

Failure to heed the WARNING instructions may result in serious injury or loss of life for the user of the machine, individuals in the vicinity or the technicians responsible for its inspection or repair.

#### CAUTION

This symbol identifies instructions or procedures which, if not strictly observed, may result in the damage or destruction of the equipment.

#### NOTE

## This symbol indicates points of particular interest for improved efficiency and more convenient operation.

Inappropriate use could cause problems to the environment and conflicts with other people. Responsible use of your quad bike will ensure that these problems and conflicts do not occur.

# TO PROTECT THE FUTURE OF YOUR SPORT, ENSURE YOU USE YOUR BIKE LEGALLY, WITH CONCERN FOR THE ENVIRONMENT AND RESPECT FOR OTHERS.

Driving quad bikes is a fantastic sport, and we hope you enjoy it to the full.

This manual has been drawn up using the data and specifications available at the time of writing. Any differences you may notice should be attributed to improvements in the production and quality of the product. GAS GAS MOTOS, S.A. is constantly improving its vehicles in order for you to better enjoy them.

#### WARNING

Hydrogen gas produced by the battery may explode if exposed to flames or sparks.

Keep the area ventilated and free from naked flames.

<u>ABAB</u>

#### CONTENTS

<ul> <li>Introduction</li> <li>General advice</li> <li>Contents</li> <li>Specifications</li> <li>Information concerning your safety</li> <li>Important information</li></ul>	4 5 7 8 10
- Component location	
- Principal parts of the QUAD	. 14
Ignition key	
Starter	
Lights	
Hazard lights	
Throttle twist-grip	
Clutch handle	
Front brake handle	
Rear brake pedal	. 16
Emergency stop	. 16
Reverse gear control	
Shift pedal	. 17
Fuel cap	. 17
Seat	. 18
Battery	18
Front guard	. 18
Rear guard	. 19
Foot rest assembly	
Foot guards	. 19

	Front and rear brakes	20
	Fuel	21
	Coolant system	22
	Chain	
	Throttle twist-grip	
	Lights	
	Tyres	
- Use	of your QUAD	
	Starting the engine	24
	Changing gear	25
	Starting the vehicle	25
	Stopping the engine	
	Running in engine	
-Drivir	ng your QUAD. Practical advice	28
-DIIVII	Getting to know your QUAD	
	Drive carefully using common sense	
	How to turn with your QUAD	
	Going up slopes	
	Going down slopes	
	Crossing slopes	
	Crossing shallow water	
	Driving over rough ground	
	Sliding and skidding	31
- Tuni	ng	
	Tuning front suspension	
	Tuning rear suspension	

<u>ABAB</u>

- Regula	r maintenance and adjustments	34
•	Maintenance chart	34
	Adjusting clutch lever	35
	Adjusting brake handle and pedal	35
	Checking brake fluid level	36
	Checking front and rear brake pads	37
	Changing wheels	
	Swinging arm	38
	Adjusting and lubricating chain guide	38
	Checking coolant level	39
	Air filter	41
	Spark plugs	43
	Inspection and lubrication of cables	45
	Replacing lights	45
	Transmission	47
	Engine oil	47
- Cleanin	g, lubrication and storage	50
	Cleaning	50
	Lubrication	51
	Storage	52
- Multi-fu	nction	53
- Table o	f tightening torques	54
- Diagrar	n of tightening torque locations	55
- Fault di	agnosis	56
- Electric	al schemas	62
- Guaran	tee manual	64



#### SPECIFICATIONS

ENGINE	
Cylinder size:	443 cc
Type:	Single-cylinder, 4-stroke with 4-valve cylinder head.
Cooling system:	Liquid.
Bore and stroke:	95 x 62.6 mm.
Injection system:	MAGNETI MARELLI.
Ignition:	Integrated on injection system.
Člutch:	Hydraulic multi-disc .
Gear box:	5 speeds and reverse.
Transmission:	Primary with gears, secondary with chain.
Starter:	Electric engine and auxiliary pedal.
CHASSIS	
Chassis:	Multi-tubular with double shim, manufactured in Cr-Mo Steel.
Front suspension:	Trapezoidal arms with 2 OHLINS multi-adjustable shock absorbers.
Rear suspension:	Aluminium alloy swing arm, weld-free. Progressive system with multi-adjustable ÖHLINS shock absorber.
Front brake	2 180 mm auto ventilated disc brakes with Brembo double-piston calliper.
Rear brake:	2 220 mm auto ventilated disc brakes with Brembo double-piston calliper.
Rims:	Aluminium
Front tyres:	21 x 7.00 – 10"
Rear tyres:	20 x 11.00 – 9"
Kick-start pedal:	Forged aluminium

#### DIMENSIONS

Wheel base:	1,280 mm
Overall width:	1,200 mm
Weight without rider:	175 Kg.
Fuel tank capacity:	18 litres

#### SAFETY INFORMATION

THE QUAD is not a toy: its use may be dangerous.

THE QUAD is driven in a different manner to other vehicles, such as cars or motorcycles. A collision or overturning can happen very fast, even during routine manoeuvres such as turning, driving on slopes or over obstacles, unless the necessary precautions are taken.

#### WARNING

If these instructions are not heeded, you may suffer serious injury or even loss of life.

- Do not drive the QUAD before reading the following sections: "Information concerning your safety", "Use of the QUAD" and "Principal parts of the QUAD". Even if you are an experienced quad bike driver, not all makes and models are the same and it is imperative to understand the machine well before commencing the first trip.

- It is forbidden to carry passengers, nor is the bike adapted for this.

- Sit correctly with both hands holding the handle bar, both feet on the foot rests and your back straight.

- Reduce your speed according to your skill, experience, weather conditions, or ground conditions.

- Drive with caution over changing ground and reduce speed when not familiar with the terrain.

- Always carry out routine inspections as described in this manual before going out on the quad bike, to ensure that it is in safe working condition.

- Driving a quad bike is unlike driving any other vehicle, and you will particularly notice this when turning. Practice turning first on flat open ground without any other vehicles in the area.

Read the advice given in the manual in the section *-Use of your QUAD*.

- Similarly for steep hills whether you are going up or coming down. Start by trying gentle slopes and increase the level of difficulty gradually. Advice is given concerning this aspect in the same section as mentioned above.

- Follow the procedures described in this manual if the engine stalls. If the engine stalls and the vehicle begins to roll backwards, follow the special braking procedure described in this manual Get off the quad on the up-side of the slope. Remember that your safety comes first and then that of the machine, it is important to clearly understand this.

- To cross a slope move your weight towards the rising section, read the advice in the manual concerning this. Avoid slopes which are too slippery or with a loose surface.

- Never try to go over large obstacles such as rocks or tree trunks, the machine is not prepared to do this and you may damage either you or the machine.

- Do not deliberately skid if you do not know how to do so correctly, as it could be dangerous. As for the above, first practice on flat open terrain, without obstacles and follow the advice given in this manual. You must never lose control of the machine.



- This quad bike is designed to be driven in water with a maximum depth of 35 cm. Do not use the machine in rapids, read the instructions about this type of terrain carefully. Remember that when the brakes get wet, they lose braking capacity. On exiting the water, pump the brakes several times to dry them more quickly.

- Always use tyres of the size and type described in this manual.

#### WARNING

- Always switch off the engine when refuelling.

- Do not smoke while refuelling, petrol is highly inflammable and may be explosive in certain conditions. Always switch off the engine. Keep the area ventilated and free from naked flames or sparks; this includes spot light appliances. The petrol could catch fire and cause burns. Take care not to spill petrol on the engine, exhaust pipe or silencer.

- When transporting the quad with a trailer, make sure that the quad is kept in an upright position.

- Petrol is toxic. In the event that petrol is swallowed, excess fumes are inhaled, or should fuel splash in eyes, seek medical attention immediately. If petrol spills onto the skin, wash off with soap and water. If petrol spills onto clothes, change your clothes.

- Always drive the machine in a well ventilated area. Do not start or run the engine in a closed space. The exhaust fumes are toxic and can cause loss of consciousness or even death in a very short time.

#### IMPORTANT INFORMATION

The quad bike leaves the factory with some components not fitted, in order to ease transportation. The dealer should fit the remaining pieces and you should receive the QUAD ready for use. This section is for your information only.

A kit is included for making adjustments to the carburettor, these adjustments should only be made by a qualified mechanic, and only when necessary. On delivery, the carburettor has been calibrated correctly, therefore no adjustments are necessary.

A wrench is also included for adjusting the chain and for aligning the swing arm. Do not lose it, it will be of great use.



5. Wrench for chain and swing arm adjustment.



1. Chain guard. 2. Swing arm guard. 3. Foot rest assembly.

4. Foot protectors.

#### **IDENTIFICATION NUMBERS**

Make a note of the vehicle identification number (serial n<sup>o</sup>), information about the model and the key identification number in the spaces provided, to facilitate proceedings when ordering spares, or as a reference in the event of robbery.

#### Serial number

(B) is located printed on the front. This indicates the chassis number with which the vehicle is registered.





NOTE The vehicle serial number is used to identify your machine.



#### Qualification approval plate

The quad bike bears the relevant qualification approval plate (A), which has the serial number also printed on the front. This number should match that which appears in the accompanying documents. We recommend you write the information in the following table.



#### Key identification number

The quad bike has two pairs of keys. The first (C) and most important is the ignition key, and the second (D) is for opening the fuel tank and seat. The identification number appears just below the join of the keys as can be seen from the diagram. This number is required to order a new key in the event of loss.



A GAG

#### LOCATION OF COMPONENTS

GAS GAS WILD HP 450



- 1- Clutch handle
- 2- Light switch
- 3- Light flash button
- 4- Full beam button
- 5- Emergency stop
- 6- Ignition key
- 7- Parking brake
- 8- Start and stop engine control



- 9- Front brake handle
- 10- Throttle twist-grip
- 11- Front guard
- 12- Brake pads
- 13- Fuel tank cap
- 14- Foot rest grille
- 15- Rear guard

ABA S





- 16- Front headlight casing
- 17- Throttle housing
- 18- Seat
- 19- Front shock absorber
- 20- Engine
- 21- Shift pedal

- 22- Swing arm23- Exhaust pipe24- Front brake fluid tank
- 25- Kick-start pedal
- 26- Brake pedal
- 27- Engine oil tank

ANGAN

#### PRINCIPAL PARTS OF THE QUAD

#### **IGNITION KEY**

Key (A) is located in the front section of the handle bar. To switch on the ignition, turn the key clockwise to position "ON". Turn the key anticlockwise to switch off the ignition, until reaching the position "OFF".



#### STARTER

The quad bike is fitted with an electrical starter motor and a manual kick-starter using the pedal.

The control (B) is located to the right of the handle bar.

The pedal **(C)** is located on the right-hand side of the quad bike. You will find it in the rest position; pull it down until it is in the operating position.





#### LIGHTS

NOTE The headlight and tail lights can only be switched on after the engine has been started



Switch (C) slides into three positions. You will find it in the "OFF" position.



To switch on the dipped beam  $(\underline{\mathbb{S}})$  slide switch **(C)** into position  $(\neg \overline{\mathbb{Q}})$ . To switch on the full beam  $(\underline{\mathbb{S}})$  press the red switch **(D)**. The instrument panel will display the full beam lamp  $(\underline{\mathbb{S}})$ . To switch off the lights slide the switch to position ( $\bullet$ ).



The indicators (F) are located in the lower part of the left-hand handle. By sliding the switch to the right, the right-hand indicator comes on, and similarly the left-hand indicator comes on when the switch is moved to the left.

The button for the horn is located in the same area (G).

#### HAZARD LIGHTS

Button located in the front section of the quad bike (H), in front of the handlebar. This also works when the ignition is switched off. When the ignition is switched on, a lamp lights up on the button itself.

#### NOTE

Be sure to heed the laws of each country with respect to the use of these lights.



#### THROTTLE TWIST-GRIP

Before starting the engine, check that the throttle spins round smoothly **(I)**. Ensure that it returns to idle position when the handle is released. There is a return spring fitted inside the handle which reduces speed and brings the engine back to idle speed when the throttle handle is released.



#### WARNING

If the throttle does not work correctly, it may be difficult to increase or reduce the speed of the vehicle as desired. This could cause accidents. Check the throttle is working correctly before starting the engine. If the throttle does not work smoothly, find out why. Solve the problem before using the machine, or go to a specialist workshop.

#### **CLUTCH LEVER**

The clutch lever is located on the left of the handle bar. Use the lever to engage and release the clutch (J). For the clutch to work smoothly, the lever should be tightened quickly and released slowly.



**A**KI**A**KI

#### FRONT BRAKE LEVER

The front brake lever (A) is located on the right of the handle bar. Use the lever to apply the front wheel brakes.



#### **REAR BRAKE PEDAL**

The brake pedal (**B**) is located on the right-hand side of the lower part of the chassis. Use the pedal to apply the rear wheel brakes.



#### **EMERGENCY STOP**

The quad bike is fitted with an emergency stop system. This is a mechanism which prevents the quad bike from continuing to go in the event the rider falls off.



End (C) is attached to the vehicle and end (D) is securely attached to the rider.

It consists of an elasticised cable, one end of which is attached to the vehicle and the other to the rider, in such a way that the end of the cable which is attached to the vehicle detects any brusque movement and detaches.

On becoming detached, the engine stops automatically.

#### NOTE

### Make sure that the parking brake has been released before using the throttle.

We recommend attaching the cable to a resistant point as it is important that this part of the cable never becomes detached. (E.g. The cable could be tied to trousers, a jacket, around the wrist...but always to a resistant point).

#### WARNING

It is forbidden to use the quad bike before attaching the emergency stop system. The non-observance of this warning could have serious consequences.



#### SHIFT PEDAL

The machine is fitted with a 5-speed gear box. The shift pedal (E) is located on the left-hand side of the engine and is used in combination with the clutch when changing gear.



#### FUEL TANK CAP

To open the fuel tank cap turn the key anticlockwise.





#### SEAT

To remove the seat, use the same key as for the fuel tank cap **(B)**. Put the key in the lock which is located on the right-hand side of the QUAD. Turn the key clockwise and then insert your hand between the seat and the upper part of the casing. The seat should lift easily.

#### NOTE When replacing the seat, ensure that it is securely fixed.



#### BATTERY

This battery is maintenance free and checking the fluid level is not required.

It is advisable to check the charge of the battery periodically The operating instructions for the battery are as follows:

- 1. Check the battery voltage in open circuit status (disconnected).
- In the event that the battery voltage is below 12.60V, or has been stored for over 6 months, the battery should be recharged according to the procedure described in section 3.2.
   In the event that the voltage is above 12.60V, the battery can be fitted

in the vehicle without requiring recharging.

- 3.1. Constant voltage charge mode.
  - Constant voltage = 14.40 14.70V

- Initial charge current = 0.1 0.5 Cn
- Charge duration = 6 hours minimum / 24 hours maximum.
- 3.2. Constant power charge mode.
  - Maximum charge current = 0.1 Cn
  - Recommended charge time = 5 8 hours.
  - The result ((charge current)x (charge time)) should fall into the range:  $0.5-0.8\ \mbox{Cn}$

#### Note

In the event that charging procedures are used different to the above, never exceed the maximum permissible charging currents or charging time of 24 hours.

#### CAUTION

Exceeding the standard manner of charging may seriously shorten the life of the battery. Never exceed the standard charge.

#### CAUTION

Inverting the polarity of the battery terminals may cause problems when charging the battery and damage the battery system. The red terminal is positive (+) and the black terminal is negative ( - ).

#### FRONT GUARD

The front guard juts out from the QUAD assembly. In the event of ahead-on collision with our vehicle, the guard attached directly to the chassis, will soften the blow and prevent serious damage to the steering and remainder of the vehicle.



#### **REAR PROTECTION**

Similarly, the rear guard **(D)**, also juts out from the quad bike assembly. This guard prevents us from overturning backwards, given that an accident of this type could result in serious injury.



#### NOTE

If the slope is very steep, the guard will be unable to prevent the vehicle from tipping backwards, therefore act with care on slopes and examine the terrain closely.

#### FOOT REST ASSEMBLY

#### WARNING

The foot protectors and foot rest assembly are a form of protection vital to the safe driving of the QUAD. The quad bike has very thick wheels and these could easily drag your leg under them, causing serious injury.

The quad bike is fitted with a pair of foot rests (**E**), one on the right and the other on the left. Both foot rests have a grille. The assembly

protects feet and legs from the wheels should you lose your balance and your feet slip off the rests. The width permits you to move freely.



#### FOOT PROTECTORS



The foot protectors (F) are located between the rests and the wheels, and are a further protection in addition to the foot rest assembly. By filling the space we remove any possibility of injury to the lower limbs from the wheels.

#### CHECKS TO MAKE BEFORE STARTING THE MACHINE

#### WARNING

Always inspect the QUAD each time it is going to be used, to ensure that it is in safe working condition.

Always follow the inspection and maintenance programmes and procedures described in this manual. If the machine is not inspected, there is an increased risk of accident or breakdown.

#### FRONT AND REAR BRAKES

#### WARNING

Before driving, always check the brakes. Do not drive the QUAD if any problems are detected in the brakes or if it is possible that braking capacity has been lost, as this may cause an accident. If there are any problems which can not be solved following the adjustment procedures described in this manual, ask a specialised workshop to inspect the QUAD.

A worn disc is automatically compensated and does not affect either the brake lever or the brake pedal. Therefore, the only parts to require adjustment are the play of the brake lever, and the position and play of the brake pedal.

#### Brake lever and pedal

Check there is no free play in the front brake lever (1). In the event that there is, check the condition of the brake pads and see section "Adjustments and Maintenance".

Check there is no free play in the front brake lever (2).



Check that the height of the brake pedal is correct. If the height of the pedal is incorrect, ask a specialised workshop to adjust it. Check the working of the lever and the pedal. They should move smoothly and there should be a sensation of firmness on applying the brakes. If this is not the case, ask a specialised workshop to inspect the vehicle.

#### Brake fluid level

Check level of brake fluid. Top up with fluid if necessary. (See section "Maintenance")

Recommended fluid D.O.T 3 or D.O.T 4

NOTE The fluid issued at the manufacturers is D.O.T.4.

#### **Brake fluid leaks**

Check for leaks of brake fluid around the seals of the brake fluid pipes and tank. Apply brakes hard for one minute. In the event of a leak, ask a specialised workshop to inspect the machine.





(A) and (B). Fluid tanks for front and rear tanks.

#### The working of the brakes

On starting the engine, check the brakes while travelling at low speeds to ensure that they work correctly. If they do not provide sufficient braking, inspect the brake pads for wear.

#### FUEL

The GAS GAS WILD 450 c.c. has a 4-stroke engine and takes 98 octane unleaded petrol.



Ensure that there is sufficient petrol in the tank.

#### NOTE

We recommend the tank is not allowed to run dry. If there is dirt in the bottom of the fuel tank, on draining the tank the dirt might enter the engine and cause damage.

To open the petrol tank cap, pull the clip upwards, and insert one of the two red keys given to you on purchasing a GAS GAS quad bike. Turn key to the right and pull cap off with the key still inserted, as shown in the previous picture.

#### **Recommended fuel**

CAUTION	
Only use unleaded petrol. The use of leaded petrol may cause serious damage to the internal working of the engine.	e

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

#### WARNING

Petrol is highly inflammable and may be explosive in certain conditions. Always stop the engine and do not smoke. Ensure that the area is well-ventilated and free from naked flames or sparks; this includes spot light appliances.



#### THE COOLING SYSTEM

#### **Radiator hose**

Check that the radiator hoses are not cut or worn and that possible connections do not leak.

#### Radiator

Check the radiator fins for obstruction from insects or mud. Clean off any obstructions with a jet of low-pressure water.

#### CAUTION

Using a high pressure water source could damage the radiator fins and render them ineffective. Do not block or divert the intake of air to the radiator, by fitting unauthorised accessories. Interference to the radiator may cause overheating and damage the engine.

#### Coolant

This absorbs excessive heat from the engine and transfers it to the air through the radiator. If the coolant level has dropped to a constant level, the engine may overheat, resulting in severe damage.



Check coolant level in tank (A) while the engine is cold (the coolant level varies with the engine temperature). The level is acceptable while it falls between the two marks. If the level falls below, top up antifreeze. Change coolant every two years.

#### NOTE

The coolant fluid should oscillate between the two lines, neither above nor below.

#### CHAIN

Check the general condition and tension of the chain, before each trip. Lubricate and adjust the chain as necessary (See section 12 *Maintenance*).

#### THROTTLE TWIST-GRIP

Check throttle is working correctly. It should accelerate smoothly and return to idle position when released.

Where necessary, check the assembly, grease the moving components to ensure correct working.

#### LIGHTS

Check headlamps and brake lights to ensure they are in perfect working condition. If required, make the necessary repairs for their correct working.

#### TYRES

Always use the recommended tyres.

A SAK

#### WARNING

The use of unsuitable tyres or driving the vehicle with the tyres inflated to incorrect or uneven pressures, may result in loss of control, and the consequent risk of accident.

$\sum$	Manufacturer	Size	Model
Front	MAXIS	21 x 7,00 - 10"	RAZR
Rear	MAXIS	20 x 11,00 - 9"	RAZR

Tyres should be inflated to the recommended pressure. Measure the tyre pressure using a low pressure gauge.

CAUTION
Check and adjust tyre pressures when the tyres are cold.
Pressure should be equal on both sides.

	Recommended	Minimum	Maximum
Front Rear		0,370 bar/ 37 Kpa 0,420 - 0,470 bar/ 42 - 47 Kpa	0,430 bar/ 43 Kpa 0,480 - 0,530 bar/ 48 - 53 Kpa

#### Tyre wear limit:

Examine how the tyres wear. If wear is in the centre of the tyre, this implies pressure is too high.

If wear is at the sides this indicates that the tyre is not sufficiently inflated.

Therefore, wear should be spread uniformly over the surface of the tyre.

Replace the tyre when the depth of tread has worn to 3 mm.



Minimum tread (H): 3 mm.

#### USE OF YOUR QUAD.

#### WARNING

The User Manual should be read carefully to familiarise yourself with all the controls. Loss of control could cause an accident or injury.

#### STARTING THE ENGINE

#### CAUTION

Before starting the engine for the first time, read the section "Running in the engine".

#### WARNING

In cold weather, always make sure that all the control cables operate smoothly before driving the vehicle. If the cables are frozen or do not operate smoothly, you may lose control of the QUAD and cause an accident.

1.- Tighten the brake lever while operating the locking lever to apply the parking brake.



#### WARNING

 Always apply the parking brake before starting the engine. The QUAD could move unexpectedly if the brake is not applied. This could give rise to loss of control or a collision.

- Make sure that the parking brake has been released before starting to drive. The brake could overheat if the QUAD is used without releasing the brake. The brake could lose efficiency and cause an accident. It would also suffer from premature wear.



2.- Turn the key (A) clockwise (position "ON").

3.- Next the rider should attach the emergency stop system (see recommendations in the section "Principal parts of the bike/emergency stop").



4 - Without using the throttle, press the electric start button.



#### NOTE

If the engine does not start, turn the key to the OFF position and wait a few seconds before trying again. The attempts should be as short as possible, in order to save the battery.

#### **CHANGING GEAR**

The quad bike is fitted with a 5-speed gear box.

The gear box is a return shift type, implying that to go from first to third gear you must first go to second, that is shift through the gears one by one.

To engage first gear from neutral press the clutch, press the shift pedal and slowly release the clutch.

(The next section describes the process of starting the machine in more detail).

#### CAUTION

When changing gear, press the shift pedal firmly to ensure a positive shift. An incomplete shift may cause the transmission to jump to another gear and could damage the engine.

#### CAUTION

Do not drive under inertia with the engine switched off for long periods, nor tow the machine for long journeys. Even in neutral, the gearbox is only lubricated when the engine is running. Insufficient lubrication could cause damage.

#### STARTING THE VEHICLE

1.- Operate the throttle twist-grip.

#### CAUTION

Always release the accelerator to change speed, otherwise the engine and the transmission could be damaged.

2.- As explained earlier, to engage first gear from neutral you should press the clutch, step on the shift pedal and release the clutch, at the same time accelerating slowly.

3.- Once the machine has reached the desired speed, release the throttle and, at the same time, quickly operate the clutch lever.

4.- Change to second gear (taking care not to pass through neutral).

5.- Partially open the throttle and gradually release the clutch lever.

6.- Follow the same procedure to change to the next gear.

#### WARNING

Sudden acceleration or releasing the clutch lever too fast could cause an accident and cause the machine to skid and overturn. Open the throttle gradually and release the clutch gently.

#### To decelerate

To decelerate or stop, release the throttle and apply the brakes gently and evenly. As the vehicle loses speed, change to a ower gear. Before shifting down to a lower gear, wait for the engine speed to fall sufficiently. Incorrect use of the brakes or gear shift could cause the tyres to lose grip, resulting in a loss of control and risk of accident.

A. K. A. K.

#### WARNING

Ensure that the engine speed has fallen sufficiently before changing to a lower gear, If you shift to a lower gear while the engine speed is too high, the wheels may stop spinning. This may result in loss of control, and risk of accident and injury. The engine and transmission could also be damaged.

#### STOPPING THE ENGINE

1 - Change gear to neutral.



2.- Turn the key anticlockwise (OFF position), the engine will automatically stop.



3.- Use the parking brake (B) to park the vehicle.

4 - The key may be removed from the ignition.

#### RUNNING IN THE ENGINE

Running in is a very important part in the life of your quad bike, therefore we recommend that you follow the instructions below carefully.

#### NOTE

### The run-in is a period (normally the first 20 hours) during which you should observe various points for priming the engine.

For the first 10 hours, we recommend you do not travel at more than half throttle for any length of time, or in any other situation which might cause the engine to overheat. On the other hand, momentary acceleration (3 or 4 seconds) is not a problem for the engine, to the contrary, it is good for the engine. Every acceleration period must be followed by a rest period, so that the engine can eliminate all the accumulated heat.

During the first 10 hours, try to avoid always travelling at the same speed, vary the speed occasionally.

In the next 10 hours (10-20), we recommend you do not travel at more than 3/4 throttle for any length of time.

#### DRIVING YOUR QUAD. Practical advice.

#### GETTING TO KNOW YOUR QUAD

This QUAD is designed for experienced drivers, for recreational use. Although you may be an expert driving other all-terrain vehicles or motorcycles, driving the QUAD requires special skills which can only be acquired with practice.

We recommend you start by getting to know your quad bike on flat ground with no obstacles and no other drivers around. Do not attempt difficult manoeuvres until you are totally familiar with the QUAD.

A quad bike is not a vehicle for jumping over obstacles, refrain from doing so, otherwise you could cause serious damage to the vehicle.

#### WARNING

Do not start driving the QUAD before reading this manual carefully. Ensure that you understand the working of the controls and pay special attention to the section "Information concerning your safety".

#### DRIVE CAREFULLY AND USE COMMON SENSE

As we have already mentioned, driving your QUAD requires special skills which can only be acquired through continual practice over a certain length of time.

Take as much time as necessary to learn the basic techniques before attempting more difficult manoeuvres.

#### WARNING

Never carry passengers. Carrying a passenger could lead to an accident, resulting in injury to the driver and/or passenger. The quad bike has an emergency stopping system should the rider fall off the bike, but it is not prepared for the fall of a second passenger.

# THE WILD QUAD IS NOT APPROVED TO CARRY PASSENGERS. ONLY THE DRIVER IS PERMITTED TO RIDE THE QUAD.

#### Equipment

- Always wear an approved helmet of your size.

- In addition, you should wear: goggles, gloves, boots, long-sleeved shirt or jacket and long trousers.

#### WARNING

It is important to wear all the equipment we have described, otherwise the risk of serious injury or even loss of life is increased.

#### Checks prior to driving

For the necessary safety and correct care of the QUAD, always carry out the checks before driving. These are explained in detail in the section *"Checks to make before starting the machine"*.

#### While driving

Always use the foot rests and protectors, they will protect you from serious injury to the lower limbs. Always kee feet on the foot rests while driving and both hands on the handlebar.

#### WARNING

As explained in this manual, the use of the foot rests and protectors is vital for protecting your body.

#### Modifications

Never modify the QUAD by using or fitting unsuitable accessories. Parts and accessories added to this vehicle should be originals from GAS GAS or equivalent parts designed for use with this QUAD, and they should be fitted and used in accordance with the instructions.

Inappropriate fitting of accessories or the modification of this vehicle may result in changes to the handling which, in certain situations, could lead to accident. If doubtful, ask an authorised dealer.

#### Exhaust system

The QUAD exhaust system heats up when the vehicle is in use. To prevent burns, avoid touching it. Park the QUAD in a place reserved for it or in an area away from pedestrians and children.

#### HOW TO TURN WITH YOUR QUAD

If you are travelling at a low speed, you will have no problem turning with the handlebar. On the other hand, as the speed increases so does the difficulty in turning. The two rear wheels are mounted rigidly on the same shaft and turn together at the same speed, therefore, unless the wheel on the inside of the turn is allowed to skid or lose some grip, the QUAD will be difficult to turn. A special technique is required to turn, therefore it is important to learn the technique on flat ground, without obstacles and at a reduced speed. The speed can be increased as your skill increases. On approaching a bend, reduce speed and start to turn the handlebar in the desired direction. Lean your body towards the inside of the bend to counteract the inertia produced by the speed. Use the throttle to keep a steady speed throughout the manoeuvre. This manoeuvre will enable you to take the bend correctly. The picture demonstrates how to do so.



If poor techniques are used, the QUAD may continue in a straight line. If the machine does not turn, stop and practice the procedure again.

A.K.S.A.K.

If the machine starts to overturn towards the outside while taking the bend, reduce speed, turn the steering or lean further towards the inside of the bend. It may also be necessary to reduce speed gradually and turn steering towards the outside of the bend to prevent overturning.

#### **CLIMBING SLOPES**

We recommend you start by climbing gentle slopes and increase the steepness as your skill increases. In all events avoid slopes with loose or slippery surfaces, or with obstacles, given that as we have already mentioned the quad bike is not designed for jumping over obstacles, therefore refrain from doing so.



On climbing a slope it is important to move your weight to the front part of the QUAD.

You can achieve this by leaning forwards and moving your sitting position further back. On very steep slopes, stand up on the rests and lean forwards slightly.

#### WARNING

Do not accelerate sharply or change gear suddenly. The QUAD may flip over backwards. In this case, the rear guard will not protect you, as you have considerable inertia speed. Never top the peak of a slope at full speed. There may be an obstacle on the other side, a sharp drop, another vehicle or person. If you are climbing a slope and find that you have not estimated your ability to reach the top correctly, turn round with the QUAD while you still have forward traction (and space to do so) and start to descend.

If the machine starts to roll backwards, do not use the back brake to stop and do not try to engage a gear, the quad bike could easily flip over backwards.

Get off the vehicle immediately on the up side of the slope. Always remember that your safety comes first.

#### **COMING DOWN SLOPES**

When coming down a slope with the QUAD, move your weight back as far as possible, towards the up side of the slope.

Move your body backwards along the seat and remain seated with arms straight.



Select a low gear which allows the engine compression to act as the main brake. Incorrect braking may lead to loss of traction. See example in the picture.

#### **CROSSING SLOPES**

To transversally cross a sloping surface with your QUAD, you need to place your weight in such a way as to maintain the correct balance. Before trying to cross a slope, make sure you have learnt the basic



skills on flat ground. Avoid slopes with slippery surfaces and rough terrains where you might lose your balance.

While crossing the slope, lean your body to the up side of the slope. It may be necessary to correct the steering on going over loose surfaces, by turning the front wheels slightly upwards. When driving on slopes do not make closed turns in either an upwards or downwards direction.

If the QUAD starts to overturn, turn the steering gradually in a downwards direction provided there are no obstacles in the way. On regaining balance, again turn the steering in the direction in which you wish to travel.

#### **CROSSING SHALLOW WATER**

With the QUAD, it is possible to slowly cross water of up to 35 cm in depth. Before entering the water, choose your path carefully. Enter the water where there are no sharp drops and avoid stones or other obstacles which may cause the QUAD to skid or lose stability. Drive slowly and carefully.

#### WARNING

Do not drive through rapids or water deeper than that specified in this manual. Remember that if the brakes get wet, the braking capacity may be reduced. Check the brakes when you come out of the water. If necessary, pump the brakes several times to allow the friction to dry them.

#### NOTE

After driving the QUAD through water do not forget to eliminate trapped water, by dismounting the retainer hose located at the bottom of the air filter housing. Wash with fresh water if you have been driving through salt water or mud.

#### DRIVING ON ROUGH GROUND

Driving over rough ground should be carried out carefully. In this way any obstacle which may cause damage to the QUAD, destabilize it or cause an accident can be seen. Keep feet firmly on the foot rests at all times.

Avoid jumping with the vehicle, as this may cause you to lose control and damage the machine.

#### SLIDING AND SKIDDING

When driving over loose or slippery surfaces, take care as the QUAD could skid. Unexpected skidding which is not corrected could lead to a serious accident.

To reduce the tendency of the front wheels to skid on loose or slippery terrain, sometimes it is useful to load your body weight onto the wheels.

If the rear wheels of the QUAD start to slip sideways, usually it is possible to regain control by turning the steering (if there is sufficient space to do so) in the direction of the skid. It is not a good idea to accelerate or brake until the skid has been corrected.

With practice, after some time, the technique of controlled skidding can be mastered. Before trying such manoeuvres choose the terrain carefully, as stability and control are reduced while manoeuvring. Remember that skids on extremely slippery surfaces, such as ice, should be avoided, as you could lose control completely.

#### NOTE

Learn to safely control skids by practicing at low speed on smooth flat terrain.



#### TUNING

#### TUNING FRONT SUSPENSION

Formed of two trapezoidal arms with 2 ÖLHINS multi-adjustable shock absorbers.

To adjust to different styles of driving, the shock absorber spring can be adjusted or replaced by an optional one. The strength can be easily adjusted, therefore it is not necessary to change the oil viscosity.



#### **Extension adjustment**

#### WARNING

The suspension parts heat up when working. Never touch the adjustment control of the shock absorber compressor, the adjustment control of the shock absorber extension, or the oil reservoir with bare hands or any other part of the body until the compression components have cooled.



To adjust the extension, turn the control  $({\rm B})$  of the lower part of the shock absorber by hand.

There is a possibility of 22 clicks in total. The standard rebound adjustment measurement is 7 clicks.

Turn clockwise to the maximum, now it is totally closed. Turn anticlockwise until 7 clocks have been heard, now it is in standard position. If it is set at 0 clicks, the extension is too stiff, on the other hand, if it is set at 22 clicks, the extension is too soft.

#### WARNING

Always adjust the left and right shock absorbers to the same measurement. Uneven adjustment could give rise to faulty handling and loss of stability, with the resulting risk of accident.

#### Adjusting the compression

To adjust, turn control (A) of the upper section of the shock absorber by hand. Turning anticlockwise to the maximum will close it completely. There is a possibility of 38 clicks in total.

The standard compression adjustment is set at 20 clicks.

Total hard compression takes place at 0 clicks.

Total soft compression takes place at 38 clicks.



#### TUNING REAR SUSPENSION

This is a swing arm manufactured in aluminium alloy, and is weldfree. The progressive system using rods, with the "OHLINS" multiadjustable shock absorber. As with the front suspension, it can be adapted to different types of driving.

#### Extension adjustment

To adjust, turn control (A) of the lower section of the shock absorber by hand.

There is a possibility of 28 clicks in total. The standard compression adjustment is set at 13 clicks.

Turn clockwise to the maximum, now it is totally closed. Turn anticlockwise until 13 clocks have been heard, now it is in standard position. If set at 0 clicks, the extension will be very hard, on the other hand, if it is set at 28 clicks, the extension will be very soft.



#### Adjusting the compression

To adjust, turn control **(B)** of the upper section of the shock absorber using a flat headed screwdriver. Turning anticlockwise to the maximum will close it completely.



There is a possibility of 56 clicks in total. The standard compression adjustment is set at 28 clicks. Total hard compression takes place at 0 clicks. Total soft compression takes place at 38 clicks.

#### **REGULAR MAINTENANCE AND ADJUSTMENTS**

#### MAINTENANCE CHART

The first service by a specialised workshop is at 500 km or two tanks of fuel. Successive services should be made every 2,000 km or every three months.

	is at 500 km or two tanks of fuel			ging oil	Lubrication	ing	ting	ening	lf necessary
	is at 500 km or two tanks of fuel. 2,000 km or every three months.	Check	Filling	Changing	Lubric	Cleaning	Adjusting	Tightening	If nec
BEFORE GOING OUT ON	Petrol tank level								
THE QUAD	Brake fluid reservoir levels (front and back)								
	Play of brake lever and pedal								
	Brake pads								
	Coolant Level								
	Wear to tyres								
	General condition of chain								
	Throttle grip								
	Play of clutch lever								
	Lights								
	Indicators								-
ON RETURN	Quad bike								
	Shift pedal								
	Brake pedal and lever								
	Clutch lever					_			
	Air filter								
	Air filter casing	_					-		-
	Chain guide								
	Cables								
	Radiator hose and connections				(	(			
	Exhaust								
EVERY	Wheel bearings (10 trips)								
	Bolts (see table for tightening torques)								
	Brake piston and dust guard (2 years)								
	Brake piston pump and dust guard (2 years)								
	Brake attachment (2 years)								



Inspections, adjustments and regular lubrications keep the machine in optimum safety and working conditions.

Safety is the responsibility of the owner of the machine. In the following pages the most important points concerning inspections, adjustments and lubrication are explained.

#### WARNING

Do not carry out any maintenance work to the engine while it is running. Moving parts could catch clothing or your body and cause injury. Electrical components may cause sparks, electrical shocks and fire. Before carrying out any maintenance work, stop the engine, unless otherwise indicated. If not familiar with the maintenance of your vehicle, it is better to take it to a specialised workshop.

#### ADJUSTING CLUTCH LEVER

Correct clutch lever play is 2-3 mm. The play increases with the wear of the clutch plate and thus requires adjustment. When there is too much play, first try adjusting the level of the clutch lever.



Tighten the adjustment bolt to obtain the optimal play. If the adjustment of the clutch lever is at its maximum, use the clutch cylinder piston rod to adjust play.

#### ADJUSTING BRAKE LEVER AND BRAKE PEDAL

A worn disc is automatically compensated and does not affect either the brake lever or the brake pedal. Therefore, the only parts to require adjustment are the play of the front brake lever, and the position and play of the rear brake pedal.

#### Front brake lever

At first the play of the lever is directly related to the wear of the pads, that is, if you notice play in the lever, before adjusting the play it is advisable to check the brake pads carefully, in case they need changing.



Once you have checked the pads, then the brake lever can be adjusted until it feels comfortable. Tighten bolt (**D**) as shown in the picture. This bolt is covered with a piece of rubber. Remove the rubber and you will find a groove in which the bolt is inserted and adjusted. If you tighten the bolt, there will be less play and likewise, if it is loosened, the lever will have more play.
**A**\_KJ(**A**\_KJ

It is also possible that air has entered the brake fluid circuit. To bleed the system proceed as follows:



- Remove the cap from the brake fluid reservoir (E), in order to check the level.

- Remove the cap (F) of the bleed screw for the brake, (in the interior of the wheels) and fit a transparent tube onto the end.



(F)

- Once the circuit has been bled, top up the tank.

#### Rear brake pedal

Ensure that the brake responds correctly and does not rub against any part of the QUAD. To adjust play in the pedal, loosen the locking nut, turn the bolt, place the lever in the desired position and tighten the locking nut.



When the brake pedal is in the rest position there should be a play of 10 mm. If this is not the case, adjust accordingly.

#### WARNING

If the brake pedal feels spongy when operated it is possible that there may be air in the pump or it is faulty. As it is dangerous to drive under these conditions, check the brakes immediately.

#### CHECKING BRAKE FLUID LEVEL

NOTE

Regularly check the brake fluid and periodically change it. It should also be changed if it is contaminated by water or dirt.

#### Fluid level inspection

**Front:** To the left of the throttle twist-grip there is a small container for the brake fluid. If you observe the container carefully, you will see a transparent bubble appear on one of the flat sides, with which we can control what is happening inside the brake fluid reservoir. If you have just bought the QUAD, you will not see anything through the bubble because it is full. You will see the bubble when the fluid level drops, and then you will be able to control the fall in the level.

When the brake fluid level is very low, top up:

- With a Philips screwdriver, undo both screws on the container.
- Next. top up with fluid.

- Do up the screws and ensure that the container is correctly positioned.

Rear: The rear brake fluid container is under the quad bike seat.

- Take the key which opens the fuel tank and insert in the lock which appears on the right-hand side of the QUAD just below the seat.

> between the seat and the casing at the back and remove the seat. íΑ

- Turn the key.

- There is a small easily accessible reservoir (A), on which there are two marks: "MIN" and "MAX". Ideally the level of the fluid should be near to MAX. if it is much lower top up with fluid.

- Next check that the fluid container is properly closed, replace the seat and turn the key in the opposite direction. Also check that the seat has been correctly replaced.

## **Recommended liquid**

Use D.O.T 3 or D.O.T 4

# should be checked. (B), Pad (C). Brake callip (C). Brake calliper

# CHECKING FRONT AND REAR BRAKE PADS

There are 3 brake callipers: 2 in the front wheels which brake a wheel each and 1 in the transmission chain, which brakes both rear wheels together. All work in the same way and should be checked and controlled in the same way.

As we can see from the picture, the brake calliper is made up of various parts. The pad is the part which rubs against the disc and therefore it the part which wears down, so the thickness of the pad





**A**\_K3(**A**\_K3

#### NOTE

Never overuse the brake pads, if their wear is not controlled, the brake calliper unit could be severely damaged.

When the thickness of the pad has decreased considerably, go to a shop specialising in spares and request a replacement.

#### CHANGING THE WHEELS

The wheels should be changed when they are worn or when they are punctured. Proceed as follows:



- Each wheel has four bolts (E) which you should undo using a hexagonal wrench, size 15.

- Loosen the bolts and remove the wheel from the shaft.
- To refit the wheel, follow the same procedure in reverse order.

#### SWING ARM

It is important that the shaft supporting the two rear wheels is correctly aligned, otherwise either the shaft has too much play, or the bearings might be damaged.

- To adjust the shaft bolt, go to the rear of the QUAD. The bolt is to the right of the swing arm.

- Using the wrench (F) provided with the vehicle, adjust the shaft.



# ADJUSTING AND LUBRICATING THE CHAIN

The chain should be checked, adjusted and lubricated as part of the regular maintenance to prevent excessive wear. If the chain is worn or incorrectly adjusted (too tight or loose), it may come off or even break.

# WARNING

A chain which comes off or breaks can get caught in the engine or in the rear wheel, damaging the bike and causing it to lose control.

#### Checking chain tension



The tension between the chain and the swing arm at the height of the chain slide should be one finger, if it is more or less, adjust accordingly. Follow the procedure explained below:



- Stand to the rear of the QUAD. Near the swing arm there are 4 screws (A). - Undo the 4 screws.

- With wrench (B) provided with the QUAD, adjust the chain accordingly and then do up the 4 screws.

# NOTE

**(B)** 

Make sure that the screws are tightened and that the chain is correctly tensioned.

#### Inspecting the condition of the chain

Inspect the chain for damaged links, lost pins, unevenly worn or damaged teeth.

If the transmission chain is very damaged, visit a specialised shop to request a replacement.

# **Chain lubrication**

Good maintenance of the chain is essential to ensure the good

working of your quad bike. Chain lubrication is one of the operations which should be carried out most often.

#### When?

- After riding over wet ground.
- When the chain appears dry.
- After cleaning the motorbike.
- -If the QUAD has been immobile for a long time.

A high viscosity oil is preferable to a lighter oil as it will stay on the chain longer and provide better lubrication.

Apply oil to the side of the chain rollers so that it penetrates better; dry off excess oil.

# CHECKING COOLANT LEVEL

The coolant absorbs excessive engine heat and transfers it to the air through the radiator. If the level of the fluid has fallen to a constant level, the engine may overheat and be damaged. Check the coolant level each day before riding the QUAD.

#### NOTE

The level, in normal conditions should not fall. If you need to add fluid very often, check there are no leaks and take the bike to a specialised workshop.

# WARNING

To avoid burns, do not remove the radiator cap or try to change the fluid while the engine is still hot. Wait for it to cool down.

-39-

# Anti-freeze liquid information

To protect the aluminium parts of the coolant system (engine and radiator) from rust and corrosion, use chemical rust and corrosion inhibitors in the coolant. If corrosion and rust inhibitors are not used in the coolant, over time the radiator will rust. This will block the cooling hoses.

#### CAUTION

The use of unsuitable fluids may cause damage to the engine and the cooling system. Use coolant with corrosion and rust inhibitors designed for aluminium engines and radiators in accordance with the manufacturer's instructions.

#### WARNING

Coolant chemicals are harmful to the human body. Follow the manufacturer's instructions.

Distilled water must be used with the inhibitor chemicals and the antifreeze in the coolant system.

If the outside temperature falls below the freezing point of water, protect the coolant system with antifreeze.

Use a permanent type of antifreeze (distilled water and ethylene glycol plus corrosion and rust inhibitor chemicals for aluminium engines and radiators) in the coolant system.

For a coolant mixture ratio under extreme weather conditions, choose the mixture ratio suited to low temperatures.

#### **Coolant Level**

If a large quantity of liquid has been lost, check the level of both

containers. They are located side by side on the left hand side of the quad bike.



Normally, when the fluid in container (C) is below the level, radiator (D) should be checked.

# WARNING

Only carry out these operations when the engine is cold, the fluids may be hot, may come out under pressure and may cause burns.

- Remove the radiator cap and top up fluid.

- Remove the container cap and fill up until level is between the two marks.

- Next, start the engine and run at idle for 15 -20 seconds.

- Stop the engine and check the level of the two tanks again, probably the level will have dropped because the engine has run out of fluid.

- Refill the containers (if necessary).

# **Changing coolant**

The coolant should be changed periodically to ensure long engine life.

- Wait for the engine to cool completely.
- Put the QUAD in a horizontal position.
- Remove the radiator cap.

- Place a bowl under the drain plug and drain the fluid from the radiator and the engine, by unscrewing the drain plug which is in the lower part of the water pump cover. Immediately wipe or wash off any coolant that spills on the frame, engine, or wheels.



(A). Cover water pump (B). Cap drain coolant fluid.

# WARNING

Coolant on tyres will make them slippery and can cause an accident.

-Inspection of the coolant. If white marks are visible in the fluid, this means that the aluminium parts of the coolant system are corroded. If the fluid is brown the parts made of steel or iron in the system are rusted. In both cases clean the system.

- Check the cooling system for damage, loose joints, or leaks.

- Install the water pump cover drain plug with the specified torque shown in the table. Replace seals with new ones.

# Tighten bolts (see table of tightening torques) Water pump plug: 9 Nm.

- Fill the radiator up to the edge and fit the cap on the radiator.
- Check the cooling system for leaks.
- Start the engine, warm up the engine, and then stop it.
- Check the coolant level after the engine cools down.

# **AIR FILTER**

#### CAUTION

The air filter must ALWAYS be cleaned after going out with the Quad. Dirt may enter the engine and damage it severely.

# WARNING

A blocked air filter allows dirt to enter the carburettor and keeps the throttle open. This could cause an accident.

A blocked air filter, restricts the entry of air to the engine, increases fuel consumption and reduces engine power and damages the spark plugs.

# NOTE

There is a test hose in the lower part of the air filter casing. If dust or water enter the hose, empty it and clean the air filter element and casing.

<u>ABA</u>B



(C). Air filter casing. (D). Test hose.

**Cleaning process** 

# WARNING

Clean the filter in a well-ventilated area and make sure there are no sparks or naked flames in the vicinity of the work area (including spot light appliances).

Do not use petrol to clean the filter as this could result in an explosion.



1. Lift up the seat and in the centre you can see a blue sponae. 2. – If you hold the sponge, you will see a bolt (E) which can be loosened by hand.

3.- Remove the bolt and the filter. Take the air filter unit out of the casing.

NOTE Do not twist the element when draining.



4.- Remove the filter cade. 5. Place the filter in a tray with degreaser. This will clean the filter without damaging it.



gently and leave to dry a few minutes.

- Check the air filter for damage such as scraping, hardening, shrinkage...

If it is damaged then replace otherwise dirt will enter the throttle body.



#### NOTE The element should be damp but not dripping.

- Once it has stopped dripping, place it in a bath of lubricating and greasing fluid. If desired, you can do without the bath, and totally soak the filter with this fluid, the result is the same. Apply sponge air filter oil to the element.

If you do not have any sponge air filter oil, use engine oil.

- Also clean the cage with a damp cloth, as well as the filter casing.

- Make sure that all the cavities are clean before replacing all the components of the air filter casing.

- Grease all of the connections and bolts of the air filter and inlets.

- Place the filter in the cage and cover the filter lip with a thick layer of grease to ensure a seal and to avoid dust penetration.

- Fit the air filter into the QUAD and ensure that it is correctly connected.

#### CAUTION

Never allow the engine to be used without having fitted the air filter element. Otherwise, unfiltered air would enter the engine and cause rapid wear and possibly, damage. In addition, if the engine runs without the air filter element, this could block the throttle body resulting in reduced engine performance.

#### SPARK PLUG

The standard spark plug is shown in the table and should be tightened to 11 Nm.



The plug should be removed regularly to check the opening and the ceramic insulation.

# Standard spark plug

NGK CR8 E or DENSO U24ESR-N 0.7-0.8 mm.

The spark plug should be taken out periodically to check the electrode gap. If the plug contains oil or carbon deposits, clean with a blast of sand. After cleaning the abrasive particles, the plug should always be cleaned with a wire brush or similar. Measure the electrode gap using a gauge and adjust where necessary by bending the outer electrode. If the electrodes of the plug are rusty, damaged or if the insulation is broken, change the plug.

#### NOTE

#### Inspect every 30 hours. Replace every 60 hours.

To find the correct working temperature for the spark plug, remove and examine the insulation around the electrode. If the insulation is light brown, the temperature of the plug is correctly matched to the engine temperature. If the ceramic is white, the plug should be replaced by a cold plug. If it is black replace it with a hotter plug.

A.K.CA.K

#### NOTE If the performance of the engine falls, replace the plug to recover performance.

# Spark plug maintenance

NGK	DENSO	COMMENTS
CR7E	U22ESR-N	If the standard spark plug is wet, replace it.
CR8E	U24ESR-N	Standard
CR9E	U27ESR-N	If the standard spark plug looks glassyor is white, replace it.

#### CAUTION

Incorrect installation of the spark plug or use of the incorrect heat grade may cause severe damage to the engine, and this damage is not covered by the guarantee.

Always use spark plugs recommended by GAS GAS. Consult your dealer or a qualified mechanic to know which plug is best for your QUAD.

# Removing the spark plug

To remove the spark plug, follow the following steps:

# 1. Remove the seat.

2. Disconnect the fuel pump hoses and cables. (Caution: The hoses contain petrol).

# WARNING

Petrol may be spilt on removing the hose from the injection pump and cause a fire.

Stop the engine before removing the tank. Keep naked flames and sparks away from the fuel cap. Do not smoke.

- 3. Remove the rubber attachment on the tank.
- 4. Remove the reservoir securing bolt.
- 5. Remove the tank.
- 6. Remove the spark plug cap.

#### NOTE The spark plug is protected by a cap. Keep this clean and dry.



7. Remove the plug and clean the carbon deposits on plug using a small bodkin or a wire brush. Readjust the gap of the plug between 0.7 - 0.8 mm. (0.028 - 0.031 in). Before removing the carbon deposits check their colour, this tells us whether the standard plug is the best for our use.

# INSPECTION AND LUBRICATION OF THE CABLES

# WARNING

Inspect the cables often and replace if they are damaged. If the outer cover of the control cables is damaged, this may cause corrosion.

The cables may start to peel or be damaged. The working of the controls may be limited, which could cause an accident or injury.

Lubricate the inner cables and the ends of the cables. If the cables do not run smoothly, ask a specialised workshop to replace them.

Recommended lubricant: Engine oil

#### **REPLACING THE LIGHTS**

#### Front headlight

1.- Remove the casing covering the headlamp, by unscrewing the 5 bolts with a  $n^{\circ}$  4 Allen key.

# WARNING

The bulb is hot when it is lit and immediately after having been switched off.

Wait for the bulb to cool before touching or removing it.

You could burn yourself, or cause a fire if the bulb came into contact with something inflammable.



#### NOTE

Do not touch the shiny surface (B) with your fingers, or with a cloth, as it scratches easily. If it is dusty, clean with a feather duster.



1. 13 A. V.

3.- Undo the bolts holding the headlamp in the interior, you will need to bend down to handle them.



4.- Disconnect the bulb wiring and remove the cap (D) covering the rear part of the lamp.

5.- Next, you will see some wire clips (F), holding the bulb.



(F). Wire clips holding the bulb.

6.- Release the bulb (**E**) from the clip and remove it through the rear. 7.- Replace it with a new bulb. To fit the bulb, follow the same procedure in reverse order.

# Rear lights

## WARNING

The bulb is hot when it is lit and immediately after having been switched off. Wait until the bulb cools before touching or removing it. You could burn yourself or cause a fire if the bulb came into contact with something inflammable.

- With a Philips screwdriver, undo both bolts  $(\ensuremath{\textbf{G}})$  and remove the lens.



- To remove the bulb, press down, turning 1/4 anticlockwise, remove and replace with a new one.

- Fit the lens in the same way as you have removed it.

#### NOTE Make sure that the lens is correctly fitted.

# Indicators

- To remove the bulb, press down, turning 1/4  $\,$  anticlockwise, remove and replace with a new one.

- Fit the lens in the same way as you have removed it and make sure that the unit is correctly fastened.



-Using a Philips screwdriver undo the screws (A), located in the rear section, and remove the small lens.

#### TRANSMISSION

To ensure correct working of the transmission and clutch, keep the transmission oil at the optimum level and change it regularly. A QUAD with insufficient, deteriorated or contaminated transmission oil may increase the wear and cause damage to the transmission.

# **ENGINE OIL**

Using a premium 4-stroke engine oil will lengthen the life of your QUAD. Use oil classification SF or SG under the API classification.

The recommended viscosity is SAE 10W-50, if an SAE 10W-50 oil is not possible, use an oil in accordance with the alternatives shown in the previous table.

Checking the oil level and changing the oil regularly are two very important procedures for maintaining the perfect condition of the engine.

Initially replace the oil after 5 hours of use and subsequently every 60 hours.



The oil is pumped from the oil reservoir to the engine when this is running. The level of oil in the tank rises when the QUAD is not in use.

The oil reservoir of the engine is located in the front part of the frame. To check the oil level, follow the instructions below:

# Checking the oil level

Look at the two windows on the reservoir. When not in use the oil should only cover half of the lower window.

A) Upper window B) Lower window



4.43(4.43

1. Start the engine and leave the QUAD in neutral for 3 minutes.

#### NOTE When the engine is started, pay special attention to the care and warnings in the section on starting the engine.

2. Run a cloth across the windows to clean.

3. Accelerate progressively to 2000 rpm and hold this engine speed.

4. Watch how the oil completely covers the lower window and should never reach the upper window. If it does, allow the engine to cool, and then drain the reservoir until the level is at its optimum point.



# CAUTION

The level of engine oil should be between the lower window and the upper window, other wise the engine could be damaged. Check the level of oil visually, with the QUAD in an upright vertical position every time you are going to use the bike.

#### NOTE

Engine oil expands and thus the level increases when it is hot.

# Changing the oil and filter

The oil should be changed when the engine is warm, this enables the oil to go out through the drain in the lowest part of the engine.

# WARNING

The engine oil and the exhaust manifold can get very hot and may cause burns.

Wait until the oil and the exhaust manifold are a little cooler.

# WARNING

Engine oil is a health risk. Avoid all contact with the oil, as this could cause irritation and in the worst case skin cancer.

- Keep new and used oils out of reach of children and animals.
- -Clean clothes sleeves and pants.

- Wash yourself with soap if oil has been in contact with your skin.

To change the oil, follow the steps below:

2. Remove the sump plug (C) (The plug is located in the lower part of the QUAD).





# CAUTION

On removing the sump plug to drain the oil, you will find a copper washer. Replace this washer with a new washer every time you change the oil. 4. Remove the cover of the filter, pulling the filter element to remove it (D) and replace with a new one.



With the help of a funnel drain the oil from the engine.



3. Remove the three screws from the cover of the filter. (D).



5. Before replacing the oil filter, check that the spring (E) and the O-ring (F) are in the correct position.

#### NOTE

Used oil should be put in a suitable container for subsequent recycling.

#### WARNING

Using a filter with an incorrect design may cause engine malfunction. Use the original oil filter design from GAS GAS or an equivalent for your QUAD.

## WARNING

Errors in fitting the new element may cause engine malfunction. The engine oil will not flow if the new element is not fitted correctly.

NOTE Fit a new O-ring when the filter is being replaced.

A KIAK

9. Replace the filter cover and put in the bolts attaching the cover, but do not tighten too hard ( do not exceed the torque recommended).

10. Replace the drain caps and screw them back on accordingly. Pour new oil through the dipstick hole.

Approximately 1,800 ml or the required amount.

# WARNING

The engine could be damaged if the oil is not used correctly or if the GAS GAS specifications are not followed.

Use the type of oil specified in the section on Petrol and Oil recommendations.

11. Start the engine and allow it to run some minutes. Check for oil leaking from the filter cover.

12. Check the oil level is correct according to the oil level verification process.

# LUBRICATION AND STORAGE

## CLEANING

Frequent cleaning of your vehicle will not only serve to improve its appearance, but will also improve its general performance and lengthen the useful life of many components.

Before washing the QUAD take certain precautions to prevent the water entering certain parts:

Exhaust	<ul> <li>Cover with a plastic bag tied with elastic bands.</li> </ul>	
Clutch lever, brake, grips and starter button.	- Cover with a plastic bag.	
Air filter intake.	- Cover with insulation tape or with a cloth.	
Spark plug cap and all the filler caps.	- Make sure that they are tightly fitted.	

- If the engine casing is excessively greasy, apply a degreaser using a brush. Do not apply this product to the chain, the sprockets, or the wheel shafts.

- Remove dirt and degreaser washing the machine with a garden hose. Use only the pressure of water necessary for the job.

#### CAUTION

Excess water pressure may cause water to penetrate in the wheel bearings, brakes, transmission seals and electrical devices, resulting in deterioration.



# Where to be careful? Avoid spraying water with any great force near the:

Brake pump master cylinder and callipers, below the petrol tank ( if water gets into the ignition coil or the spark plug cap, the QUAD will not start and the affected parts will have to be dried), Front and rear wheel hubs; suspension; swing arm bearings.

-Wash all the surfaces with warm water and a neutral detergent soap.

- Rinse the machine with clean water and dry all the surfaces with a soft and absorbent cloth.

- Clean the seat with a vinyl upholstery cleaner to keep it soft and shiny.

-You can apply a car wax to all the chrome and painted surfaces. Avoid using certain waxes combined with cleaning materials. Many of these contain abrasives which migh damage the paintwork or protective finish. When finished, start the engine and leave it idling for a few minutes.

#### WARNING

Damp brakes may be less efficient, resulting in an increased risk of accident. Test the brakes after washing and pump several times, driving at low speeds, to allow the friction to dry them.

#### After cleaning

- Remove the plastic bags and clean the air filter intake.
- Lubricate the locations listed in the lubrication section.
- Start the engine and let it heat for 5 minutes.

# LUBRICATION

Lubricate the parts shown, with engine oil or grease, regularly or when the vehicle has been in wet weather and especially after using high pressure water.

Before lubricating each part, clean rusty spots with rust remover and wipe off any traces of grease, oil, dirt or grime.





(5). Shift lever.



Use a spray with pressure tube to lubricate with pressure:





(6). Throttle cable.



(7). Chain.

Lubrication of the chain is necessary after driving on wet ground or when the chain appears to be dry. A high-viscosity oil is preferable to a light oil as it stays on the chain longer, providing better lubrication.

Apply oil to the side of the chain rollers so that it penetrates better; dry off excess oil.

# STORAGE

When the QUAD is to be stored for any length of time (say for over 60 days) you should:

- Clean the entire quad bike thoroughly.

- Start the engine for 5 minutes to heat the transmission oil and then drain off ( see section on transmission).

- Put in fresh transmission oil.

- Empty the fuel tank (If fuel is left in for any length of time it will deteriorate).

- Lubricate the drive chain and all the cables.

- Oil all the unpainted metal surfaces to prevent rust, avoid using oils on the brakes and rubber parts.

- Wrap the end of the exhaust in a plastic bag to prevent rusting

Position the quad bike so that none of the four wheels touch the ground ( if this is not possible, place cardboard under the wheels).
Put a cover over the quad to keep dust and dirt from collecting on it.

#### To get the quad back into use after storage.

- Remove plastic bag from exhaust.
- Make sure the spark plug is tight.
- Fill the fuel tank with fuel.
- Check all the points listed in the Section «Daily Pre-ride. Inspection».
- General lubrication



# MULTIFUNCTION

The Multifunction has two buttons, one to change the display (mode) and the other to reset certain functions.



When the battery is connected the clock/timer display appears, pressing Mode changes the display in the following order:

1. Clock/timer.

2. Speed (Km/h or Miles/hour according to the program).

3. Total distance in (km or miles). This is stored in the memory even if the battery is disconnected.

4. Trip distance (can be reset).

#### Setting the time

The time is set from the clock display by holding down the **Mode** button until the display changes to adjust hour mode, where by pressing **Reset** the hours can be changed.

Pressing **Mode** changes to the minute adjustment, which are modified as for the hours using the **Reset** button. After modifying the minutes press Mode for the clock to start from the second zero of the selected minute , making coordination with a selected time easy (e.g. in competition).

#### Chronometer

To measure a time (chronometer), hold down the **Reset** button until the zero point. Counting begins immediately.

The **Trip distance in Km or Miles** can be reset by pressing the **Reset** button.

#### Trip distance in Km

To program the trip distance in Km or Miles. Once the battery is connected the display indicates that the programme is active (Metric or Imperial). To change connect the battery while holding any of the buttons down, the change will appear on the display.

This function will remain in the memory permanently even if the battery is not connected.

# **Clock precision**

The clock precision can be adjusted if it is fast or slow. (consult).

# Wheel design

The design of the wheel may change (10"). This affects the precision of the speed and distance measurements.

# Backlight

The backlight is on an independent circuit which accepts from 8 to 18 volts in AC (typical 2T) or DC(typical 4T, red positive, black negative). The circuit is protected.



(The Mode button is used to change screens.)

ABAB

# TIGHTENING TORQUE TABLE

Tighten all of the bolts and nuts using the correct spanners. If not correctly tightened this could damage the quad or lead to an accident.

	Name of part	Nm	Kgm	Unit Nº
Е	Cylinder head bolts	25	2.5	3
	Cylinder nut	34	3.5	3
Ν	Engine drain plug	20	2.0	3
G	Kick pedal bolt	20	2.0	8
0	Kick pedal nut	25	2.5	8
	Shift pedal bolt	10	1.0	6
	Spark plug	11	1.0	3
Ν	Water pump cover drain plug	9	0.9	3
Е	Engine mounting bolt	35	3.6	3
	Engine cylinder head struts	35	3.6	3
	Calliper mounting bolts	25	2.6	1
	Disc plate mounting screws	10	2.5	1
С	Rear brake pedal bolt	36	1.0	10
н	Sub frame support bolt	26	2.7	9
	Rear shock absorber bolt	39	4.0	7
Α	Rear disc wheel drive bolt	29	3.0	4
	Rocker arm bolt	81	8.3	7
S	Rod bolts	81	8.3	7
0	Steering rod	80	8.0	2
S	Front trapezium	25	2.6	2
	Front hub	120	12.0	2
	Rim bolts	15	1.6	1
S	Rear axle	160	16.0	7
	Rear rims	165	16.6	7



# DIAGRAM OF TIGHTENING TORQUE POSITIONS

Below we display the positions of the bolts detailed on the previous page. These are grouped by units.





- 1. Unit- Front wheel
- 2. Unit- Front suspension
- 3. Unit- Engine
- 4. Unit- Transmission
- 5. Unit- Rear wheel

- 6. Unit- Shift pedal.
- 7. Unit- Rear suspension
- 8. Unit- Kick-start pedal
- 9. Unit- Chassis
- 10. Unit- Rear brake pedal



# FAULT DIAGNOSIS

NOTE This is not an exhaustive list, it is meant simply as a rough guide to assist troubleshooting for some of the more common difficulties.

	FAULT	CAUSE	SOLUTION
1	The starter motor does not work	<ul> <li>The fuse for the starter relay has blown.</li> <li>Battery discharged.</li> <li>Low temperature.</li> </ul>	<ul> <li>Remove the seat and change the fuse of the starter relay.</li> <li>Charge the battery and investigate the causes for discharging, visit a specialist workshop.</li> <li>Start engine with start pedal.</li> </ul>
2	The engine does not rotate	<ul> <li>Crankshaft locked.</li> <li>Cylinder/ piston/ crankpin journal seizure.</li> <li>Transmission assembly seizure.</li> </ul>	<ul> <li>Go to a specialist workshop.</li> <li>Go to a specialist workshop.</li> <li>Go to a specialist workshop.</li> </ul>
3	Engine rotates but does not start	<ul> <li>Fuel supply incorrect.</li> <li>Quad bike has been a long time inactive.</li> <li>Spark plug soiled or humid.</li> <li>Engine flooded.</li> </ul>	<ul> <li>Check the fuel pump relay by removing the seat, check that the fuel pump filter, situated below the fuel tank is not blocked.</li> <li>It is advisable to drain the old fuel from the tank. When the fuel tank is refilled with new flammable fuel the engine starts immediately.</li> <li>Dry the spark plug out or replace it.</li> <li>To "unflood" the engine, full throttle, operate the kick-start pedal 5 to 10 times or operate the electric starter twice in 5 seconds. Then start the engine as described above. If the engine does not start, undo the spark plug and dry it.</li> </ul>



	FAULT	CAUSE	SOLUTION	
3	Engine rotates but does not start	- The ECU pin connector, generator or coil oxidised or in poor condition.	- Remove the seat and the fuel tank, clean the ECU pin connector and treat with a contact spray.	
		- Petrol /air mixture incorrect (Trim Epprom).	- Clean the petrol tank ventilation. Adjust the throttle body by-pass. Adjust the conduit of the air filter.	
4	The engine starts but does not stop	- Air supply incorrect.	<ul> <li>Clean the petrol tank ventilation. Adjust the injector mounting. Check the injector connection. Check air filter conduit.</li> <li>Fill the fuel tank with fuel.</li> </ul>	
5	The engine overheats	- Insufficient coolant in the circuit.	<ul> <li>Add coolant, check the seal of the cooling system.</li> <li>Clean the radiator fins or change.</li> </ul>	
		- The radiator is soiled or partially obstructed.		
6	The engine does not run smoothly	- Injection system maladjustment. (Trim Epprom).	- Adjust the injection system. Visit a specialist workshop.	
		- Valve adjustment incorrect.	- Adjust the valve play. Visit a specialist workshop.	
7	The engine is under powerful or accelerates badly	<ul> <li>Fuel supply faulty.</li> <li>Air filter obstruction.</li> <li>Exhaust deteriorated with leaks.</li> <li>Valve set too small.</li> <li>Decompression maladjusted.</li> </ul>	<ul> <li>Clean and check fuel system.</li> <li>Clean or change the air filter.</li> <li>Check if the exhaust system is deteriorated, renew the glass fibre in the silencer if necessary.</li> <li>Adjust the valve play. Visit a specialist workshop.</li> <li>Verify the operation of the system.</li> </ul>	
8	High oil consumption	<ul> <li>Piston-cylinder ring diameter tolerance excessive.</li> <li>Engine oil level is too high.</li> </ul>	<ul> <li>Adjust the tolerance by changing the piston rings.</li> <li>Correct the level of engine oil. Drain oil as necessary from the engine.</li> </ul>	

<u>ABAB</u>

	FAULT	CAUSE	SOLUTION	
8	Engine consumes too much oil	- The quality or viscosity of the oil is insufficient.	- Empty the engine oil and fill with oil of the recommended viscosity.	
9	Abnormal engine noise	<ul> <li>Ignition problems.</li> <li>Valve adjustment play.</li> <li>Over heating.</li> <li>Go to a specialist workshop.</li> <li>Adjust the valve play. Visit a specialist workshop.</li> <li>See chapter 5.</li> </ul>		
10	<ul> <li>Injection system maladjustment. (Trim Epprom).</li> <li>Fuel of poor quality or octane rating incorrect.</li> <li>Spark plug in poor condition or specifications incorrect.</li> <li>Exhaust system joints deteriorated.</li> <li>Go to a specialist workshop.</li> <li>Drain the petrol and fill with fresh or higher incorrect.</li> <li>Change spark plug for a new one or reconspecifications incorrect.</li> </ul>		<ul> <li>Go to a specialist workshop.</li> <li>Drain the petrol and fill with fresh or higher octane petrol.</li> <li>Change spark plug for a new one or recommended one.</li> <li>Check if the exhaust system is deteriorated. The seals should be in perfect condition, if not, they must be changed</li> </ul>	
11	White fumes from the exhaust         - Cylinder head gasket leak (water leaking into cylinder).		- Change the cylinder head gasket. Visit a specialist workshop.	
12	2 Brown fumes from the exhaust - Air filter obstruction.		- Clean or change the air filter. Visit a specialist workshop.	
13	Gears don't engage	<ul> <li>Clutch does not release.</li> <li>Shift fork worn or locked.</li> <li>Gear locked in transmission.</li> <li>Shift lever damaged.</li> <li>Selector position spring broken or loose.</li> <li>Down selector mechanism spring broken.</li> </ul>	<ul> <li>Go to a specialist workshop.</li> <li>Change the gear fork.</li> <li>Go to a specialist workshop.</li> <li>Change the gear lever.</li> <li>Go to a specialist workshop.</li> <li>Go to a specialist workshop.</li> <li>Go to a specialist workshop.</li> </ul>	



	FAULT	CAUSE	SOLUTION	
13	Gears don't engage	<ul> <li>Broken spring of down selector.</li> <li>Cylinder change if broken.</li> <li>Gear ratchet spring broken.</li> </ul>	<ul> <li>Go to a specialist workshop.</li> <li>Go to a specialist workshop.</li> <li>Go to a specialist workshop.</li> </ul>	
14	Gears jump	<ul> <li>Gear change fork damaged in the gears.</li> <li>Gear teeth worn.</li> <li>Gear nipple damaged.</li> <li>Groove gear drum worn.</li> <li>Gear change fork pivot worn.</li> <li>Drum position selector spring broken.</li> <li>Gears broken</li> </ul>	<ul> <li>Change. Go to a specialist workshop.</li> <li>Change. Go to a specialist workshop.</li> <li>Change. Go to a specialist workshop.</li> <li>Change shaft. Go to a specialist workshop.</li> </ul>	
15	Clutch slipping	<ul> <li>No play in the clutch handle.</li> <li>Clutch plate worn.</li> <li>Clutch housing worn.</li> <li>Clutch spring broken or weak.</li> <li>Clutch plates worn.</li> </ul>	<ul> <li>Go to a specialist workshop.</li> <li>Replace the clutch plate. Visit a specialist workshop.</li> <li>Replace the clutch hub. Visit a specialist workshop.</li> <li>Go to a specialist workshop.</li> <li>Change the clutch disks. Visit a specialist workshop.</li> </ul>	
16	The quad bike is unstable	bike is unstable       - Steering rod nut loose.       - Adjust the steering rod nut, make below the nut which will prevent undone.         - Steering bearings damaged or worn.       - Steering bearings damaged or worn.       - Replace the steering bearing.         - Steering shaft bent.       - Change the steering rod. Visit and the steering rod.		
17	Shock absorption too hard	- Decompression maladjusted.	- Turn the control of the upper part of the front and rear shock absorbers to the left. Remember to evenly adjust both front shock absorbers. For further information see <i>"Tuning suspension"</i> .	

ABAB

	FAULT	CAUSE	SOLUTION	
17	Shock absorption too hard.	- Excessive tyre pressure.	- Verify tyre pressure.	
18	Shock absorption too soft	- Rebound poorly adjusted - Low tyre pressure.	<ul> <li>The hydraulic system must be stopped by turning the control of the lower section of the shock absorbers to the right. Remember that as with the compression, both from shock absorbers should be adjusted equally. See <i>"Tuning suspension"</i>.</li> <li>Verify tyre pressure.</li> </ul>	
19	Quad bike makes strange noises       - Drive chain incorrectly adjusted.         - Chain worn.       - Chain worn.         - Rear sprocket worn.       - Chain lubrication insufficient.         - Rear wheels misaligned.       - Brake disk worn.         - Brake disk worn.       - Brake pads incorrect position or crystallised.		<ul> <li>Adjust the chain.</li> <li>Change the chain, rear sprocket and secondary transmission pinion.</li> <li>Change the rear sprocket.</li> <li>Lubricate using a correct chain lubricant.</li> <li>Align the rear wheels.</li> <li>Replace the brake disk.</li> <li>Refit the pads or change them.</li> </ul>	
20	<ul> <li>Quad bike makes strange noises</li> <li>- Cylinder damage.</li> <li>- Brackets, nuts, bolts not properly tightened.</li> </ul>		<ul> <li>Replace the damaged cylinder.</li> <li>Verify and adjust to the correct tightening torques.</li> </ul>	
21			<ul> <li>-Replace.</li> <li>Let down the wheels a little, fit the rims correctly, reinflate the wheels to the correct pressure.</li> <li>Check pressure and correct if necessary.</li> <li>Inspect wheels and change if necessary.</li> <li>Check convergence and divergence of front wheels. Align swing arm.</li> <li>Tighten the handlebar bracket and the steering shaft bolt to the correct tightening torques.</li> </ul>	



	FAULT	CAUSE	SOLUTION
22	Quad bike tends to lean to one side	<ul> <li>Chassis twisted.</li> <li>Steering incorrectly aligned.</li> <li>Steering rod bent.</li> <li>Rear wheel misaligned.</li> <li>Possible hard knock to one of the steering knuckle.</li> </ul>	<ul> <li>Go to a specialist workshop.</li> <li>Adjust the steering. Go to a specialist workshop.</li> <li>Change steering rod. Go to a specialist workshop.</li> <li>Check convergence and divergence of front wheels. Align swing arm.</li> <li>Go to a specialist workshop.</li> </ul>
23	The brakes do not function correctly	<ul> <li>Brake pads worn.</li> <li>Loss of brake fluid.</li> <li>Brake fluid deteriorated.</li> <li>Piston cylinder broken.</li> <li>Brakes incorrectly adjusted.</li> </ul>	<ul> <li>Check the condition of the brake pads and replace if necessary.</li> <li>Check the brake circuits. Change those which are damaged or broken and replace.</li> <li>Drain brake fluid and replace with new fluid, recommended by manufacturer. (See how to bleed the brake fluid circuit in the section <i>"Regular maintenance and adjustments"</i>).</li> <li>Replace the piston cylinder.</li> <li>Adjust the brakes.</li> </ul>
24	The lights blow	- Voltage regulator faulty.	- Remove the seat and the fuel tank, inspect the connections, check the voltage regulator and the fuses in the fuse box.
25	The lighting system does not work	- The fuse for the lighting circuit has blown.	- Remove the seat and check installation.

<u>ABAB</u>

# **ELECTRICAL SCHEMAS**

- Black В
- Br Brown
- G Green
- Ğr Grey
- Blue L
- Ο Orange
- R Red
- Sb
- Light blue
- V Violet
- Ŵ White
- Υ Yellow



<u>ABAB</u>



1.KJ(1.K)

# 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 GASGAS 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

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.
 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.



Notes	1	



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





C/ UNICEF n° 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