



125-250-280-300CC



2019 GAS GAS

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Thank you to the consumer

By choosing the new GAS GAS TXT GP 2019 you have just joined the great GAS GAS team, and as a user of the number one brand of off-road motorcycles, you deserve the distinguished care that we would like to offer you, both after purchasing your GAS GAS and in the explanations that we set out in this manual.

Our TXT GP 2019 is a trials motorcycle designed for top-level competition. It is, in fact, the result of many years of competing and experimenting in this demanding discipline, and many successes achieved by great riders who have contributed essential information in order to create this high-level motorcycle, a GAS GAS that has a key factor: an exceptionally reduced weight.

Congratulations because your choice has undoubtedly been the right one. With your skill at the handlebars of the motorcycle, proper preparation and the appropriate checks vital for it to be highly reliable, you can enjoy trials riding at it most comfortable and fulfilling.

Thank you for your confidence and welcome to GAS GAS

Important notice

Important notice

Read this manual carefully.

It sets out all of the aspects that should contribute to your safety and that of third parties, in addition to ensuring correct safekeeping and maintenance of the GAS GAS motorcycle that you have just purchased.

All instructions for riding and handling the motorcycle are detailed below. Each message is preceded by symbols with the following meanings:





Caution! This symbol indicates the rules and precautionary measures necessary to prevent minor and serious injuries or even the death of the user in case of not following the instructions correctly.

Attention! This indicates special warnings to avoid damage to the motorcycle. Non-compliance may lead to the automatic termination of the vehicle warranty.





Various notes. These are necessary instructions to ensure correct use of the motorcycle's control and adjustment operations, and guarantee its safekeeping and maintenance, enabling you to enjoy the satisfaction of a motorcycle in optimum condition.

The aim of this manual is to help the user to minimise and avoid possible damage to people, property, the environment and, of course, the new motorcycle. For this, all of the information set out is based on data obtained from the most recent range of the brand available just before printing. GAS GAS does, however, reserve the right to make changes without prior notice to the consumer and without incurring any kind of liability. Your nearest dealer will also help to provide you with any information you need.

Warranty terms

Warranty manual

(In accordance with Law 23/2003 of 10 July concerning Warranties in the Sale of Consumer Goods)

The manufacturer GAS GAS's warranty rules

The GAS GAS (hereinafter GG) brand hereby guarantees to the end consumer/ purchaser of the vehicle manufactured by GG that both the materials and the manufacture are free from defects in accordance with the highest quality standards. Consequently, GG hereby warrants to the final purchaser (hereinafter the "purchaser"), in accordance with the conditions set forth below, the repair of any defects in materials or workmanship detected on a new motorcycle free of charge within the warranty period and without any limitation as to the number of kilometres travelled or the number of hours of operation.

Warranty period

The warranty period shall commence 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 the vehicle first starts operating. The seller is liable for any lack of conformity which becomes manifest within the time period established under Law 23/2003 of 10 July on Warranties in the Sale of Consumer Goods from the time of delivery and in accordance with Directive 1999/44/EC for the rest of the Member States of the European Community.

For countries outside the European Community, the warranty period will be governed by the rules in force in those countries. However, if the lack of conformity becomes apparent during the first six months from the date of delivery of the motorcycle, it is presumed that this fault existed when it was delivered; from the sixth month, the consumer must prove that the non-conformity existed at the time of delivery of the goods.







During the first six months after the delivery of the repaired good, the seller shall be liable for any lack of conformity which motivated 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 the warranty period falls on a Sunday or an official holiday, the warranty period will be extended in such a way that the last day of the warranty period is the first business day after the Sunday or official holiday.

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

Obligations of the buyer

GG will be entitled to reject warranty claims if and to the extent that:

a) The buyer has not proceeded to subject the vehicle to any of the inspections and/or maintenance work required in the user manual or has exceeded the date stipulated for such inspections or maintenance work; also excluded from the warranty are any defects that appear before the date set for an inspection or maintenance work that would have never been carried out, or that will be carried out after the established date.

b) Inspection, maintenance work or repair has been carried out by third parties not recognised or authorised by GG.

c) Any maintenance or repair that has been carried out on the vehicle is in breach of the technical requirements, specifications and instructions stated by the manufacturer.

d) Spare parts not authorised for use by GG in maintenance or repair work on the vehicle have been used, or if, and to the extent that, the vehicle has been applied with fuels, lubricants or other liquids (including, but not limited to, cleaning products) that have not been expressly stipulated in the specifications of the User Manual.

e) The vehicle has in any way been altered or modified or equipped with components other than those expressly authorised by GG as admitted vehicle components.

f) The vehicle has been stored or transported in a manner inconsistent with the corresponding technical requirements.

g) The vehicle has been used for a special use other than ordinary use, such as competition, races or attempts to obtain a record.

h) The vehicle has suffered a fall or accident that directly or indirectly causes damage.

Warranty exclusions

The following items will be excluded from the warranty:

a) Worn parts, including, but not limited to, spark plugs, batteries, fuel filters, oil filter elements, chains (secondary), bulbs,





fuses, carbon brushes, footrest rubbers, tyres, chambers, cables and other rubber components.

b) Lubricants (e.g. oil, grease, etc.) and operating fluids (e.g. battery fluid, coolant, etc.).

c) Inspection, adjustment and other maintenance work, as well as all types of cleaning work.

d) Paint damage and consequent corrosion due to external influences such as stones, salt, industrial exhaust fumes and other environmental impacts or improper cleaning with improper products.

e) Damage caused by defects, as well as expenses caused directly or indirectly by incidents of defects (for example, communication expenses, accommodation expenses, car rental expenses, public transport expenses, towing expenses, express courier charges, etc.), as well as other financial damages (for example, caused by loss of use of a vehicle, loss of revenue, loss of time, etc.).

f) Acoustic or aesthetic phenomenon that does not significantly affect the condition of use of the motorcycle (e.g. small or hidden imperfections, normal noise or vibration of use, etc.).

g) Phenomena due to the ageing of the vehicle (for example, discolouration of painted or metal coated surfaces).

Various

1. In the event that the repair or replacement of the part will be disproportionate, GG will have the prerogative to decide at its sole discretion whether to repair or replace defective parts. The owner of the spare parts, if any, will be GG, without any other consideration. The GG authorised dealer who has been entrusted with the repair of defects will not be authorised to make binding declarations on behalf of GG.

2. In cases of doubt as to the existence of a defect or if a visual or material inspection is required, GG reserves the right to require the shipment of the parts on which a warranty claim is based or to request a review of the defect by a GG expert. Any additional warranty obligations on parts replaced free of charge or any service provided free of charge under this warranty will be excluded. The warranty for spare parts within the warranty period will expire on the expiration date of the warranty period of the respective product.

3. If a defect cannot be repaired and its replacement is disproportionate to the manufacturer, the secured consumer shall be entitled to cancellation of the contract (payment of compensation) or partial reimbursement of the purchase price (discount), instead of motorcycle repair.

4. The warranty claims of the buyer under the contract of sale with the corresponding authorised dealer will not be affected by this warranty. This warranty does not affect the buyer's additional contractual rights under the general conditions of business of the authorised dealer. Such additional rights, however, can only be claimed from the authorised dealer.



Recommendations



ENGINE

Recommendations for the proper functioning of your GAS GAS.

E5

 \cdot Eight hours of running-in time is recommended for proper engine functioning and duration.

 \cdot It is important to take the engine to an optimum operating temperature before using the motorcycle.

 \cdot Synthetic or semi-synthetic 2-stroke oil at 1.5% should be used for the oil-petrol mixture.

(E10

2-stroke, single cylinder, reed valve intake directly to the crankcase, liquid cooled

Recommended Fuel

Gasoline with a content of 10% ethanol

Technical data

125cc. engine	Cylinder size	124.8 cc
	Bore and stroke	54 x 54.5 mm
250cc. engine	Cylinder size	247.7 cc
	Bore and stroke	72.5 x 60 mm
280cc. engine	Cylinder size	272.2 cc
	Bore and stroke	76 x 60 mm
300cc. engine	Cylinder size	294.1 cc
	Bore and stroke	79 x 60 mm
Lubrication system	Mixture (67:1) (1.5%)	
, Ignition system	Digital CDI flywheel mag	gneto
0	0,	
TRANSMISSION		
Transmission type	6 gears, GAS GAS* Fo	our / Six system (patented).
Clutch type	Hydraulic command,	$, of 1/3 discs of adjustable progress iven ess with {\sf GASGAS}^* diaphragm$
	(patented)	
Final drive system	By chain	
Gear ratio	1st 2.996 (35x27x28	/16x24x23)
	2nd 2.571 (36/14)	
	3rd 2.187 (35/16)	
	4th 2.112 (36x26x24	l/14x28x24)
	5th 1.125 (27/24)	
	6th 0.821 (23/28)	



Technical data

Primary reduction ratio	2.777 (75/27)
Final reduction ratio	3.9 (39/10).
Overall drive ratio	8.891 (6th gear)
Transmission oil	Capacity 370cc
Туре	NILS CLUTCH TRIAL

FRAME Туре

Туре	Tubular profile made with Cr-Mo	
Tyre measurements	Front	2.75 x 21" Trial
	Rear	4.00 x 18" Trial tubeless
Suspension	Front	Telescopic fork Ø39mm
	Rear	Progressive system with adjustable monoshock
Suspension stroke	Front	177mm
	Rear	164mm
Front fork oil	OJ 01 (SAE 5)	
Front fork oil level	Ø39mm	left-130mm air chamber
	right-75	nm air chamber

BRAKES

Туре	Disc brake		
Disc diameter	Front Ø185mm. 4-piston caliper		
	Rear	Ø150mm. 2-piston calipers.	

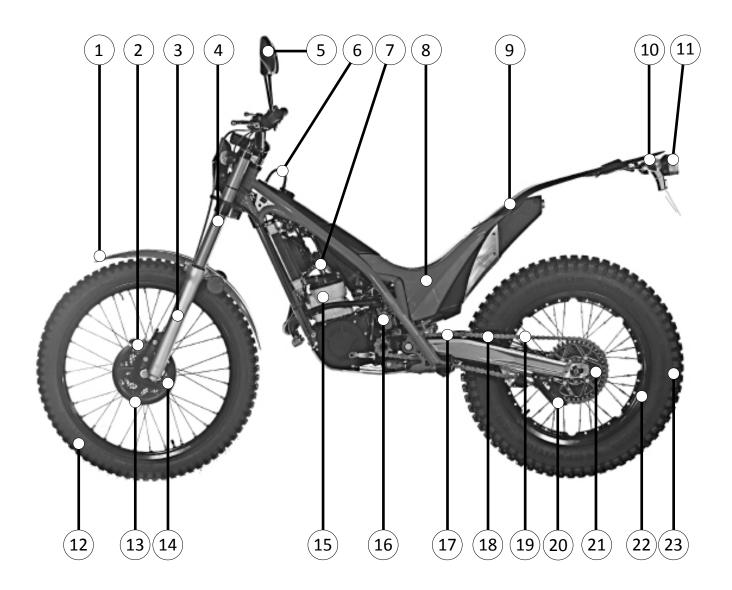
DIMENSIONS

Overall height	1130mm
Overall width	825mm
Seat height	660mm
Ground clearance	325mm
Wheelbase	1320mm
Fuel tank capacity	2.3L

(Specifications subject to change without notice, and possibly not applicable in all countries).



Location of components

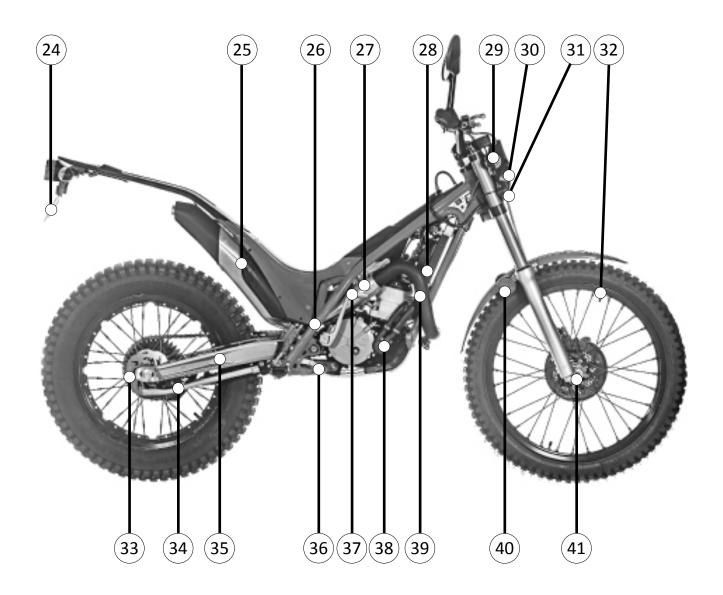


* Image of the TXT GP 2019

Number	Name	Number	Name
1	Front mudguard	13	Front brake disc guard
2	Front brake caliper	14	Front brake disc
3	Front suspension outer tube	15	Cylinder
4	Front suspension bar	16	Carburettor
5	Rear-view mirrors	17	Chain tensioner
6	Fuel breather hose	18	Chain guide
7	Spark plug	19	Chain
8	Filter box	20	Rear sprocket cover
9	Rear mudguard	21	Sprocket
10	Rear indicators	22	Rear rim
11	Tail lamp	23	Rear tyre
12	Front tyre		



Location of components

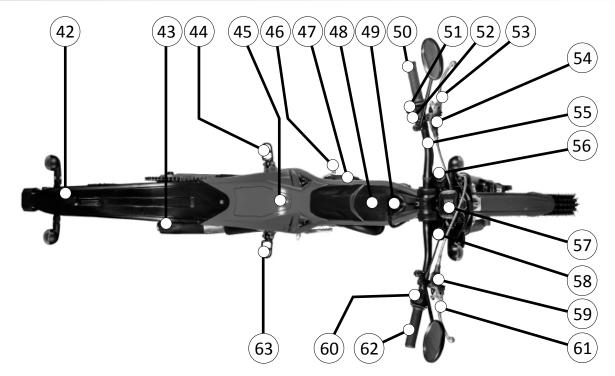


* Image of the TXT GP 2019

Number	Name	Number	Name
24	Number plate holder	36	Rear brake pedal
25	Exhaust protection	37	Kick-starter
26	Frame	38	Water pump
27	Intermediate exhaust	39	Exhaust pipe elbow
28	Radiator	40	Catadioptric
29	Front indicators	41	Front wheel axle
30	Headlight		
31	Horn		
32	Front tyre air valve		
33	Rear brake disc		
34	Side stand arm		
35	Swinging arm		



Location of components



Number	Name	Number	Name	
42	Rear mudguard	54	Clutch pump	
43	Silencer	55	Handlebars	
44	Left foot peg	56	Left suspension regulation	
45	Air filter cover	57	Multifunction	
46	Gear shift pedal	58	Right suspension regulation	
47	Ignition cover	59	Front brake pump	
48	Fuel tank	60	Throttle mechanism cover	
49	Fuel tank cap	61	Front brake lever	
50	Left-hand grip	62	Throttle grip	
51	Light controls	63	Right foot peg	
52	MIL			
53	Clutch lever			





Number	Name	Number	Name
1	Long and short-beam lights	4	Stop
2	Horn		
3	Indicators		



Maintenance chart

The maintenance and adjustment operations shown in the chart are easy and necessary to carry out to ensure that the motorcycle is kept in good condition.

MAINTENANCE CHART					
Part	Check/ Inspect	Adjust	Replace/Change	Clean	Grease/Lubricate
Rear shock absorber	Every year	-	Every 2 years	-	-
Transmission oil	30 hours	-	60 hours	-	-
Front suspension oil	-	-	60 hours	-	-
Brake adjustment	Every race	If is necessary	-	-	-
Swinging arm and tie rods	Every race	-	If is damaged	Every race	Every wash
Spark plug	Every race	60 hours	60 hours	60 hours	-
Throttle cable and twist grip	Every race	If is necessary	If is damaged	If is necessary	Every wash
Chain	Every race	If is necessary	If is damaged	Every race	Every wash
Reed block	30 hours	-	If is damaged	Every race	-
Carburettor	Every race	If is necessary	If is damaged	Every race	-
Frame	Every race	-	If is damaged	Every race	_
Carburettor jet		If is necessary	If is damaged		_
Steering bearing	Every race	-	If is damaged	-	
Piston bearing	-	- -	If is damaged		_
Wheel bearing		-	If is damaged		
Engine bearing	_	-	If is damaged	_	_
Rear sprocket	30 hours	First 5 hours	If is damaged	-	Every wash
•	60 hours				
Cylinder head, cylinder Brakes		-	Every year	-	-
Brake discs	Every race	If is necessary First 5 hours	If is damaged If is damaged	Every 2 race	-
Clutch discs	Every race	-	If is damaged	Every 2 race	-
Clutch	- Every race	-	If is damaged	-	-
	Every face	-	In a fall	-	-
Engine protector plate Exhaust	- Every race	-	500 hours		-
Muffler fibre	Every face	-	100 hours	-	-
Air filter	- Every race	-	If is damaged	- Every race	- Everywash
	Every race	If is possesary		Every race	Every wash
Steering play Brake hose	Every race Every race	If is necessary	- Every 2 years	-	Every wash
Cooling fluid	Every race	If is necessary If is necessary	Every 2 years	-	Every wash
General lubricant		IT IS NECESSALY	Every year		- Even wach
	Every race	-	-	Every race	Every wash
Front and rear rim	Every race	-	If is damaged If is damaged	Every race	-
Tyres Brake fluid level	Every race Every race	-	ii is uailiageu	Every race	-
Chain guide slide	Every race	If is necessary	If is damaged		
Kick-starter and gear shift pedal	-	-	If is damaged		Evenuwash
Brake pump piston and dust cover	Every race Every race	-	If is damaged	-	Every wash
Brake piston and dust cover	EveryTace	-	If is damaged	-	-
Piston and piston ring	- 60 hours	-	Every year	-	_
Front and rear spokes	Every race	5 hours	If is damaged	Every race	_
		5 110013	-	LVELVIACE	-
Fuel system	Every race	-	If is damaged If is damaged	- Every muddy race	Every 3 dusty race
Front suspension Exhaust O-ring	Every race	If is necessary	If is damaged	-	
-	-	-	-		-
Bolts, nuts and fasteners	Every race	If is necessary	If is damaged	-	-
Fuel hose	Every race	If is necessary	If is damaged	-	-
Radiator hose and connections	Every race	If is necessary	If is damaged	-	-
Frame protection stickers Crankcase guard	Every race	-	If is damaged If is damaged	-	-







B

Make a note of the vehicle's identification number (serial no.), information on the model label and key identification details in the spaces provided for this purpose for ease of ordering spare parts or as a reference in the event of theft of the motorcycle.

Serial number (A)

This is marked on the right-hand side of the steering tube. It indicates the frame number under which the vehicle is registered.

Manufacturer's nameplate (B)

The motorcycle has a manufacturer's nameplate including the serial number marked on the front and information that must match the documentation.

Key identification number

This is used to lock the steering. The identification number appears just at the union of the keys. This number must be used to request a new key in case of loss.



The new GAS GAS TXT GP 2019 has a manufacturer's nameplate with information that must match the documentation and a frame number marked on the steering tube.



Control panel





The controls for the lights are located by the left-hand grip, the top one of which in the main switch, which rotates to various positions.





The indicator control is located at the bottom of the left-hand grip.

By moving the switch to the right or left, the right-hand or left-hand indicators turn on.







The control panel has a light switch, indicator control, horn and engine switchoff.



Steering lock





The steering lock is located below the bottom suspension clamp, on the righthand side. For correct functioning, completely turn the handlebars to the right as far as they will go, insert the key into the slot, turn it anti-clockwise, press and then turn it clockwise. You can remove the key and the steering will remain locked.



Never leave the key in the locking mechanism. If the steering is turned with the key in the lock, it could become damaged and break the locking system.

Fuel



Fuel tank capacity: 2.3 litres

Use unleaded petrol with an octane rating equal to or greater than that shown in the table.

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



Petrol is extremely flammable and can be explosive under certain conditions. Always switch off the engine and do not smoke. Make sure that the area is ventilated and free of flammable heat sources or sparks.



Do not mix vegetable and mineral oil. Too much oil can cause excess smoke and dirt in the spark plugs. Too little oil can cause engine damage or premature wear.

Fuel





RECOMMENDS USING NILS DUO SYNT S OIL





This engine works by using a fuel mixture consisting of unleaded petrol and oil. (E5) (E10)

Fuel tank cap





The fuel tank cap is quick-acting. To open the cap, lift the tab and give it a ¼ turn anti-clockwise. To close it, place the cap with the words GAS GAS in the upper position, and turn the tab clockwise. It is advisable to frequently check the condition of the rubber to ensure correct sealing.

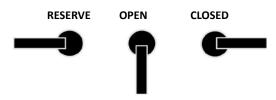


Fuel tap

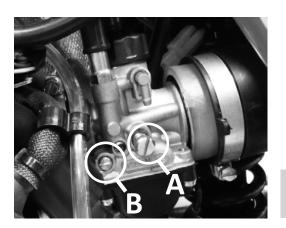




Fuel tap (A) needs to be in a vertical position for it to function. Forwards, reserve; downwards, the flow is open; and backwards, closed.



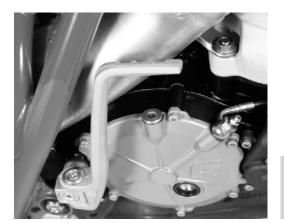
Starter / Carburation





Engine idling speed (A) and mixture inlet (B) are adjusted using the screws marked in the photograph.

Kick-start lever position





This is how the kick-start lever should look in the rest position.

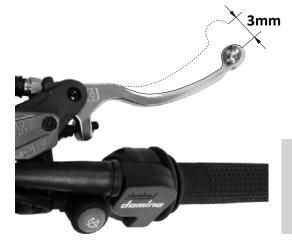


Lever settings





The clutch control should be set to the required distance and the lever must not have a set of less than 3 mm. **Never remove this play.**



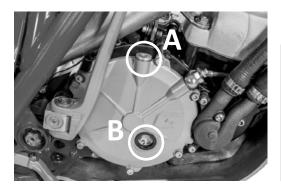
Like the clutch, the front brake lever should be at the ideal distance for operation. the lever must not have a set of less than 3 mm. **Never remove this play.**

Checking the oil level

OIL CAPACITY (See p. 9)



To replace oil, pour it through cap (A).





To check the oil level, place the motorcycle perpendicular to the ground. If the bike has been used wait a few minutes. Check the oil level using the level indicator on the lower right-hand side of the engine **(B)**. It should be between the maximum and minimum. If too high, remove the excess; if too low, open the oil cap and add the necessary amount. Use the same type and brand of lubricant that the engine already has.



Draining the crankcase





The crankcase drain plug is located on the bottom left-hand side. A hole in the crankcase guard enables easy drainage.

Cleaning the air filter



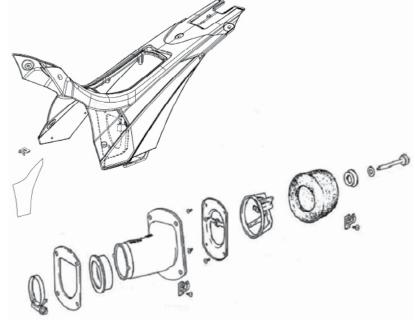


It is important to regularly check the air filter. Open the hatch located on the tail fairing of the motorcycle as shown in the photograph.

To clean it, use water and detergent, dry it and lubricate it with special filter oil. Make sure that it is correctly fitted once clean. At the bottom of the filter box, there is a flap that functions as a valve for draining liquids and/or elements that accumulate inside the filter box. Make sure that this valve is operating correctly.









Cleaning the air filter

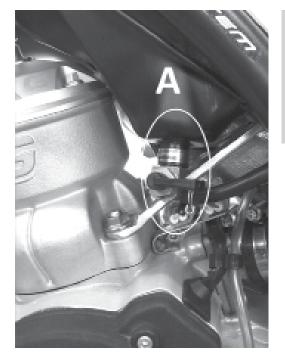


Remove the rubber visor from the inside of the box to gain free access to the air filter.



Removing the fuel tank

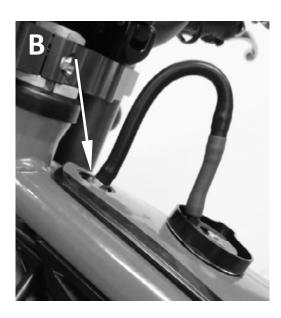




Before performing any operation on the engine, or on any other interior part of the motorcycle, remove the fuel tank located at the top of the frame. To do so, firstly ensure that the fuel cap and fuel tap are both correctly closed. Then remove the end of fuel pipe **(A)** which is inserted into the tap.

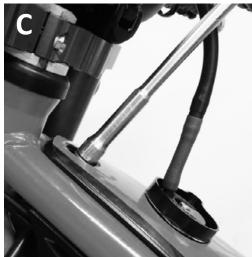


Removing the fuel tank





Thirdly, remove screw (B) which secures the top and front parts of the tank.





The entire tank can now be removed by simply lifting the front part and extracting it from the inside of the frame **(C)**.

Filling the radiator





To fill the radiator, use special coolant for light alloy engines.



To avoid burns, do not remove the radiator cap or try to change the coolant when the engine is still hot. Wait until it cools down completely.



Removing and checking the spark plug



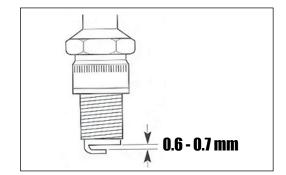


Regularly check the condition of the spark plug. To do so, remove it from its housing at the top of the cylinder head. First, remove the cap from the current and unscrew the spark plug using a suitable spanner. Blow the spark plug with pressurised air to remove traces of dirt and prevent debris from entering the engine compartment.



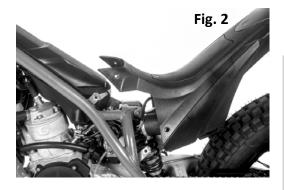


The spacing between the electrode and the arc should be between 0.6mm and 0.7mm.





Removing the filter box





To carry out any operations on the carburettor, it is advisable to remove the filter box for better access. Follow these steps:

1. Loosen the inlet nozzle clamp.

Disconnect the connector (Fig. 2)
 Completely remove the filter box

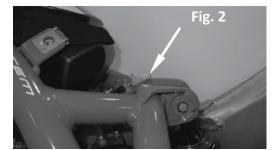
bly by loosening the reed block pipe clamp.

2. Unscrew the 4 cone-shaped M6 Allen screws that secure the filter box to the frame.

3. Pull out the filter box slightly so that the connector of the rear wiring is visible. (Fig. 1).

The carburettor will be left exposed and can be removed from the engine assem-

Loosen the two screws on the upper cover of the carburettor so that the body is



Removing the carburettor

ready for cleaning.

Take care to completely dry the inside of the carburettor. Traces of water, dirt or other elements can enter the reed block and damage it, and consequently damage the piston cylinder assembly.





Removing the carburettor





It is important to check the fuel level inside the carburettor. The height of the float should be 15.16mm.





It is necessary to carry out a thorough cleaning of the carburettor. For this, use compressed air.



Removing the carburettor





Remove and regularly clean the main jet after washing and clean the inside of the carburettor float chamber.

Removing the reed block





The reed block assembly only consists of a body, reeds and stops. To examine this assembly, remove it by unscrewing the 4 screws that hold it to the back of the left and right-hand crankcases.





Since it is the last access door to the inside of the cylinder, take special care to keep it in good condition and regularly check its properties. Take care to cover the cylinder inlet with a clean cloth to prevent foreign objects from entering the compartment when the components are handled.



The distance between the reed and the stop must be 3.3 mm on each side of the reed valve, in all displacements. The sheets must be in perfect condition. They can not have notches, scratches or bent and / or broken parts. If so, you must proceed to change the set for a new one.

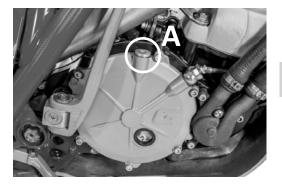


Clutch discs and spring





After any clutch actuation circuit disassembly and assembly operations, any traces of air can be removed with a bleeder.



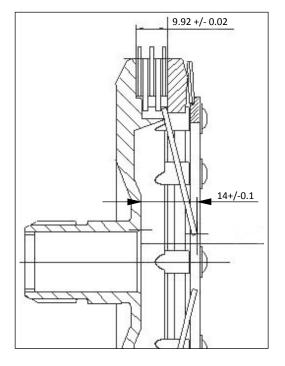


(A) The circle indicates where the engine oil is filled up.



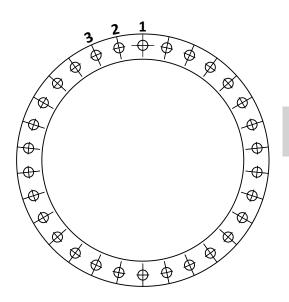


After many hours of use, check for possible wear to the clutch discs. The minimum measurement for correct operation is 9.87 mm.





Preload of the clutch spring

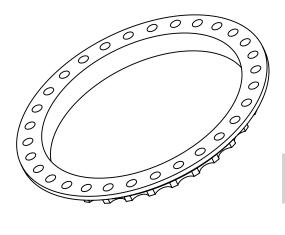


The clutch spring of the motorcycle admits three possible pre-selection, with which can vary the behavior of your vehicle.



The following table shows how the behavior of the motorcycle according to the pre-selection that is selected.

Position	Benefits / Performance	
1	Soft	
2	Medium	
3	aggressive	

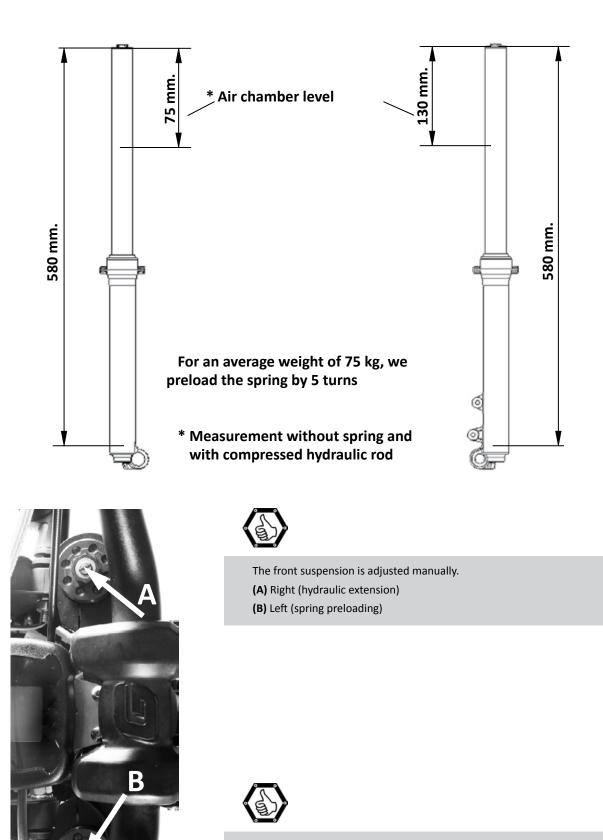




To adapt the different preloads in the optimal way, Go to your nearest Gas Gas official dealer.



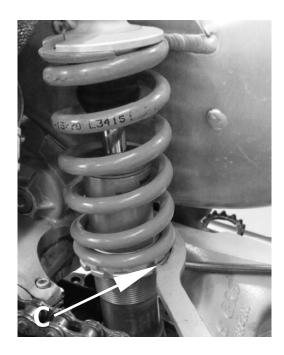
Front suspension



In the lower part of the suspension, we have the following adjustments: right (hydraulic compression) left (hydraulic brake end of travel)



Rear suspension





The preloading of the shock absorber is adjusted by rotating the toothed rings **(C)** with two special spanners. Starting from the standard preloading of 7.5 mm for 300-280-250 and 7 mm for 125, tighten or loosen, depending on the weight of the rider, reaching a maximum of 9 mm of preloading (see spring and preloading table). Preloading is the difference in length in mm between a spring when it is tensioned and when it is at rest.

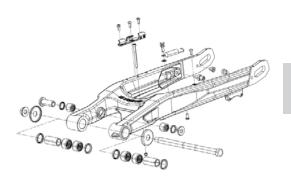
ÖHLINS SHOCK ABSORBER			
Rider weight without equipment (Kg)	K (N/mm) spring	Spring preloading (mm)	
Up to 70	65	7	
From 70 to 85	70	7.5	
Over 85	75	From 7 to 8.5	



The rebound or extension is adjusted with the screw. Its standard position is 20 clicks from closed. From this starting position, open clicks if faster extension or rebound is sought and close clicks if slower extension or rebound is desired.



Swinging arm joints





It is important to regularly remove and check the condition of the swinging arm bearings and supports.





Regularly clean, check and grease the joint adjustments of the lower part of the rear suspension.

Joint Iubrication





With special oil, grease: 1) The clutch and brake lever joints.

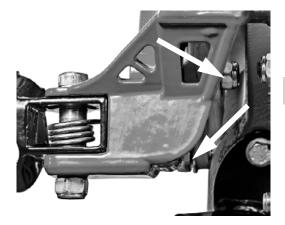


Joint lubrication



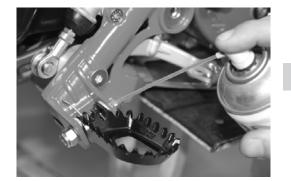


2) The gear lever joint.





3) Also the rear brake pedal (bearings).





4) Grease the fixings and springs of the footrests.



Joint lubrication





5) Grease the engine start lever joint.





6) The drive chain needs to be cleaned and greased regularly due to its constant friction and exposure to all types of elements.





7) Grease the handlebars with a thin coat of oil for smooth operation of the throttle control.



Joint lubrication





8) Grease and clean the throttle control frequently, especially after washing the motorcycle with pressurised water equipment.





9) Lift the upper cover of the throttle control to access the cam and grease it well.



Chain and wheel tension adjustment





To tension the chain and centre the rear wheel, the shaft has easily adjustable eccentrics

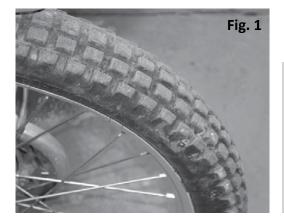
Chain coupling position





The coupling of the chain needs to be placed opposite the direction of travel

Tyre pressure and condition





Check the condition of the tyres to achieve optimum adhesion.

Fig. 1 - Bad condition

Front tyre: 2.75 x 21" TRIAL



Tyre pressure and condition





Check the condition of the tyres to achieve optimum adhesion.

Fig. 2 - Good condition

Rear tyre: 4.00 x 18" TRIAL (tubeless)

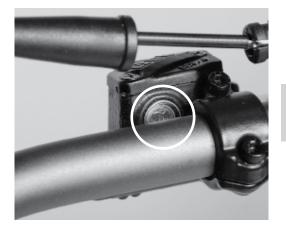


Regularly check tyre pressure. Front wheel pressure:

1.2 bar - normal**0.420 bar - only competition

Rear wheel pressure: 1.2 bar - normal **0.300 bar - only competition

Brakes





The level of the front brake fluid can be checked using the sight glass on the pump tank.



Brakes



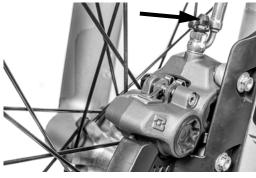


The wear of the front and rear brake pads should be checked regularly to ensure effective braking at all times.





To eliminate traces of air from the brake circuit, the calipers are equipped with bleeders.







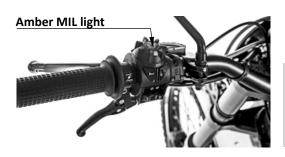
Regularly check the level of the liquid. Top up if necessary.

To check the level of the tank, place the motorcycle in a vertical position to see the actual level of the liquid. It should be between MIN and MAX.



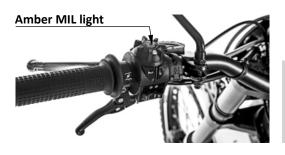


OBD system



The OBD (on board diagnostic) system features an MIL indicator light to indicate any malfunctions.

When the motorcycle is started, the MIL (malfunction indicator light), located on the top of the switch, turns on.



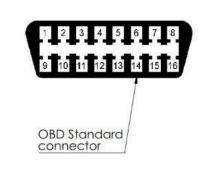
If there is no error, the MIL turns off after 5 seconds. If the OBD system detects an error, the MIL light stays on permanently. It will turn off if it is started 3 consecutive times exceeding 2,000 rpm, if no error is detected.

It can be connected to the OBD system using a diagnostics machine compatible with the ISO 15765-4 CAN protocol. To connect the 4-way socket of the motorcycle's electrical system to the diagnostics machine (18-pin JAE connector), it is necessary to use an interface cable, which can be purchased from GG's spare parts department with reference EM10225TT-CLR-1.



1
1

04T-JWPF-VSLE-S	OBD Std.
1	16
2	14
3	6
4	4



Description Cable torrot diagnosis OBD No. Plane EM10225TT-CLR-1



OBD system



The 4-way socket is located on the right. To connect the Creader VI+ scan tool (or similar), the protection needs to be removed from the connector.

When the scan tool is connected, it turns on and the start screen appears connecting to the ISO 15765-4 CAN protocol that our OBD system has. If the OBD system detects an historical error, the MIL stays on permanently.

Also, if you use the Creader VI scan tool, you can see in Monitor Status the information MIL status ON. (With the key light in red at the top).



OBD system



You can cancel the error if you go to Diagnosis Menu - Erase error.

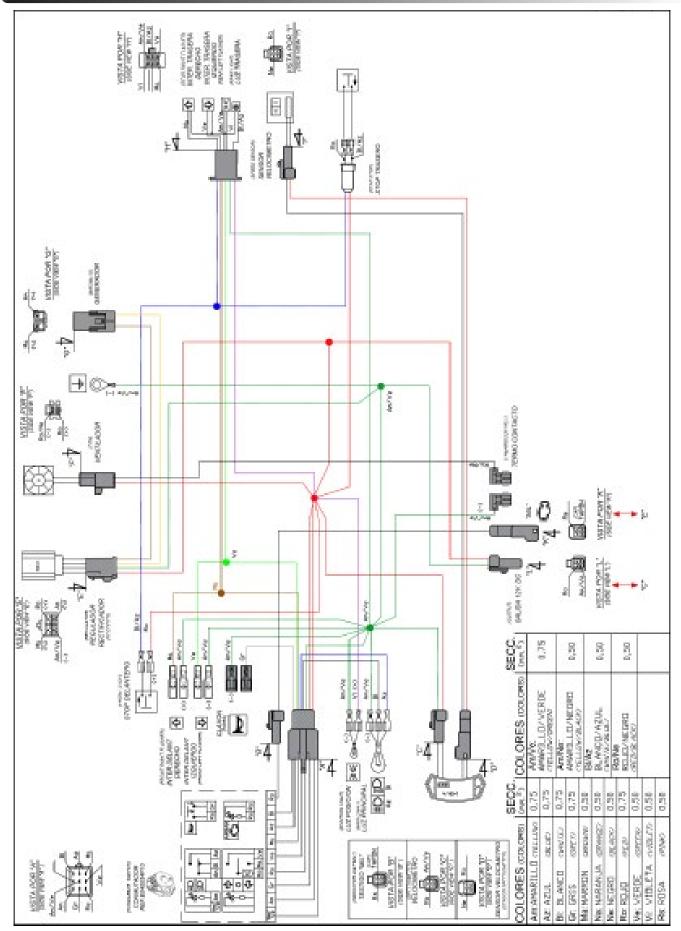
If you return to the Monitor Status screen, the MIL Status is OFF and, at the top, the green light appears turning off the red key light... And, at the same time, the MIL turns off on the switch.

On the scan tool, the following information can be viewed:

- Current RPM, maximums.
- Time in seconds that the engine is running.
- Minutes running with the MIL on.
- Total minutes of engine running. And the ISO 15031 Diagnostic Trouble Codes (DTC):
- P0350 Ignition coil malfunction.
- P0315 Ignition pick-up fault
- It is possible to access the DTC and clear all historical errors.

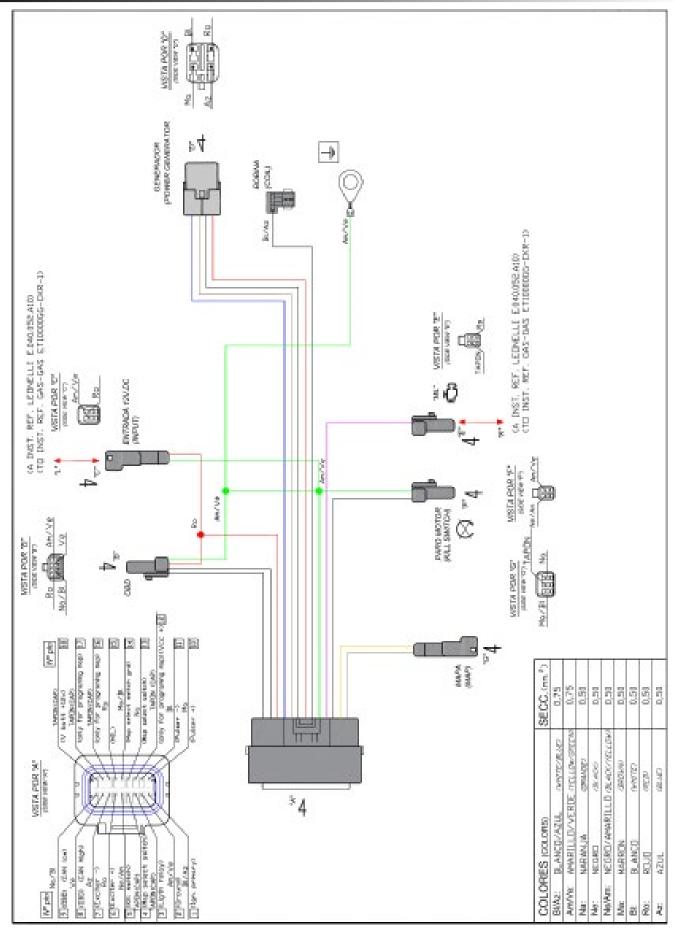


Approved electrical system





Ignition electrical system





Tightening torque

	PART NAME	N-m
	Front wheel axle	50
	Swinging arm to frame fixing	50
	Shock absorber top fixing	40-50
	Shock absorber bottom fixing	40-50
	Tie rod fixing	40-50
	Handlebars	18-25
	Hand levers	7-10
FRAME	Radiator fixing	7-10
A	Front fin bridge	7-10
2	Brake pedal	27-32
	Muffler fixing	18-25
	Rear wheel axle	50
	Rear brake caliper fixing	27-32
	Front brake caliper fixing	27-32
	Exhaust elbow fixing	27-32
	Engine fixing	18-25
	Rear brake pump fixing	7-10

	PART NAME	N-m
	Spark plug	11
	Ignition fixing	7-8
	Clutch fixing	7-8
	Cylinder stud fixing	25
	Reed fixing	7-8
	Clutch mass fixing	3-4
L LL	Semi-crankcase fixing	7-8
ENGINE	Water pump cover fixing	7-8
ס	Clutch cover fixing	7-8
Z	Flywheel fixing	40
	Water fitting	10
	Ignition cover	7-8
	Engine drain plug	12
	Kick-starter pedal screw	12-13
	Gear shift pedal screw	7-8
	Cylinder head screws	11.5-13
	Cylinder nut	25





STORAGE

When the motorcycle needs to be stored for a long period of time, you should:

- Thoroughly clean the motorcycle.
- Start and run the engine for about 5 minutes to heat the transmission oil and then drain it (see the 'Draining the crankcase' section on p. 20).
- Put in new transmission oil.
- Empty the fuel tank (if left for a long time, petrol deteriorates).
- Lubricate the chain and all cables.
- Put oil on all unpainted metal surfaces to prevent rust, but avoid getting it on the brakes and rubber parts.
- Wrap the exhaust pipe with a plastic bag to prevent rusting.
- Place the motorcycle in such a way that the two wheels do not touch the ground (if this is not possible put cardboard underneath the wheels).
- Cover the motorcycle to protect it from dust and dirt.

To put it into operation after storage:

- Remove the plastic bag from the exhaust pipe.
- Tighten the spark plug.
- Fill up the fuel tank.
- General lubrication.
- Check tyre pressure, inflate them to the correct pressure if necessary.



To avoid excessive ageing of the plastic and other washable parts of the motorcycle, we recommend careful cleaning of them. If you use high pressure and/or temperature water equipment, take care to keep the water jet at least 30 centimetres away from the surfaces to ensure that the plastic stays shiny and the stickers that decorate the motorcycle are not removed.



Multifunction



Multifunction marker (only on approved models)

The multifunction device is water resistant and consists of a red backlit LCD screen



WARNING

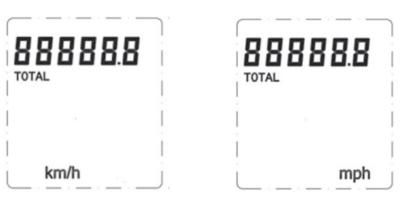
The multifunction device is water resistant but not submersible. Do not wash with pressurised water. Do not leave the device in direct sunlight when the motorcycle is not being used. Avoid contact with petrol, degreasers or other chemical cleaners as they could damage the device. Remember to always pay attention to the road when you are riding.

• Total distance travelled from 0.0 to 99999.9 km





- Speedometer, up to 199 km/h
- Units of measurement, kilometres or miles, depending on the reference of the device.



* The speed displayed is updated every 0.5 sec

*The units of measurement cannot be changed, they depend only on the model purchased.



TROUBLESHOOTING

NOTE

This is not an exhaustive list of faults, just some of the most common.

	FAULT	CAUSE	SOLUTION
1	Engine does not run	- Seized crankshaft.	- Go to a specialized workshop.
		- Seized cylinder / piston / crank pin	- Go to a specialized workshop.
		bearing.	
		- Seized transmission assembly.	- Go to a specialized workshop.
		- Motorcycle inactive for long time	- Drain old fuel from tank. When fuel tank full of new fuel, it
			will start immediately.
		- Dirty or wet spark plug.	- Dry spark plug or change it.
		- Flooded engine.	- To vent engine, accelerate to maximum and operate kick-
			start pedal 5 to 10 times. Then start engine as described
			above. If engine does not start, unscrew spark plug and
			dry.
		- Incorrect air / petrol mixture.	- Clean fuel tank ventilation. Adjust air filter duct.
			- Check exhaust valve and correct.
		- Open exhaust valve	
2	Engine starts but then stops	- Incorrect air supply.	- Close choke. Clean fuel tank ventilation. Adjust air filter
			duct.
		- Lack of fuel.	- Fill fuel tank.
3	Engine overheats	- Insufficient coolant in circuit.	- Add coolant and check watertightness of cooling system.
		- Radiator dirty or partially clogged.	- Clean radiator fins or replace it.
4	Engine functions unevenly	- Dirty, broken or incorrectly tightened	- Check condition of spark plug and clean, tighten or
		spark plug.	replace.
		- Problem with spark plug cap or cable	- Check condition of spark plug cap. If deteriorated, change
		has insufficient contact with cap.	it.
			- Change rotor.
		- Damaged ignition rotor.	- Drain fuel from tank and add new.
		- Water in fuel.	
5	Engine lacks power or accelerates badly	- Fuel supply faulty.	- Clean and check fuel system.
		- Dirty air filter.	- Clean or replace air filter. Check.
		- Damaged or leaking exhaust.	- Check exhaust system for damage, renew fibreglass thread
		- Damaged of leaking exhaust.	in muffler if necessary.
		- Dirty carburettor jets.	· · · · · · · · · · · · · · · · · · ·
		- Worn or damaged crankshaft	- Remove carburettor and clean jets.
		bearings.	- Change crankshaft bearings.
		- Clutch slips.	- Check clutch Go to a specialized workshop.



	FAULT	CAUSE	SOLUTION
6	Engine makes strange noises	- Ignition problem.	- Go to a specialized workshop.
		- Overheating.	- See section 5.
7	Exhaust backfires	- Presence of carbon in combustion	- Clean combustion chamber.
		chamber.	
		- Poor quality petrol or wrong octane	- Drain petrol and add new with higher octane rating.
		rating.	- Replace spark plug with new or more appropriate one.
		- Spark plug in poor condition or with	
		wrong specifications.	- Check if exhaust system damaged. Gaskets must be in
		- Damaged exhaust system gaskets	perfect condition, if not, change them for new ones.
8	Exhaust emits white smoke	- Damaged cylinder head O-ring. (Water	- Replace O-ring on cylinder head cover.
		leaks into cylinder).	- Go to a specialized workshop.
		- Incorrectly adjusted throttle valve	- Adjust throttle valve cable.
		cable.	
9	Exhaust emits brown smoke	- Clogged air filter.	- Clean or change air filter Go to a specialized workshop.
			- Check main jet. Go to a specialized workshop.
		- Main jet too high.	
10	Gears do not engage	- Clutch does not detach.	- Contact specialist garage.
		- Bent or seized shift fork	- Change shift fork.
		- Seized gear in transmission.	
		- Damaged gear shift lever.	- Go to a specialized workshop.
		- Broken or loose selector position	- Replace gear shift lever.
		spring.	- Adjust selector position spring or change.
		- Broken selector reverse mechanism	- Replace selector reverse mechanism spring.
		spring.	- Change shift drum.
		- Broken shift drum.	- Replace selector ratchet spring.
		- Broken gear selector ratchet spring	
11	Gears jump	- Worn shift fork in gears.	- Change shift fork.
		- Worn gear groove.	
		- Damaged gear lugs.	- Change Go to a specialized workshop.
		- Worn drum shift groove.	- Change Go to a specialized workshop.
		- Worn shift fork axle.	- Change Go to a specialized workshop.
		- Broken selector drum position spring.	- Change axle Go to a specialized workshop.
		- Broken gears.	- Change spring Go to a specialized workshop.
			- Contact specialist garage.
12	Clutch slips	- No play on clutch lever	- Contact specialist garage.
		- Worn clutch plate.	
			- Replace clutch plate Go to a specialized workshop.
		- Worn clutch hub.	- Change clutch hub.
		- Broken or weak clutch spring.	- Adjust or change clutch spring.
		- Worn clutch discs.	- Change clutch discs. Go to a specialized workshop.



	FAULT	CAUSE	SOLUTION
13	Motorcycle unstable	- Cable makes turning handlebars	- Separate cable or loosen slightly.
		difficult.	- Loosen steering shaft nut
		- Excessively tight steering shaft nut.	- Replace steering bearings.
		- Damaged or worn steering bearings.	
		- Bent steering shaft.	- Change steering shaft Go to a specialized workshop.
14	Excessively hard shock	- Excessive oil in front fork.	- Remove excess oil to reach proper level.
	absorption	- Excessively viscous oil in front fork.	
		- Bent front fork.	- Drain oil from fork and refill with oil of suitable viscosity.
			- Change front fork Go to a specialized workshop.
		- Excessive tyre pressure.	- Check tyre pressures.
		- Badly adjusted shock absorber.	- Adjust rear shock absorber.
15	Excessively soft shock	- Insufficient oil in front fork.	- Add oil to front fork to reach proper level.
	absorption	- Insufficiently viscous oil in front fork.	- Drain oil from fork and refill with oil of suitable viscosity.
		- Bent front fork.	- Change front fork Go to a specialized workshop.
			- Adjust rear shock absorber.
		- Badly adjusted shock absorber.	
16	Motorcycle makes abnormal	- Badly adjusted chain.	- Adjust chain.
	noises	- Worn chain.	 Replace chain, rear sprocket and final drive system pinion.
		- Worn rear sprocket teeth.	- Change rear sprocket.
		- Insufficient lubrication of chain.	- Lubricate with appropriate lubricant for chains.
		- Misaligned rear wheel	- Align rear wheel Go to a specialized workshop.
			- Add oil to front fork to reach proper level.
		- Insufficient oil in front fork	- Replace front fork spring.
		- Weak or broken front fork spring.	- Replace brake disc.
		- Worn brake disc.	- Reposition or change pads.
		- Badly placed or glazed pads.	- Replace damaged cylinder.
		- Damaged cylinder.	- Check and adjust to appropriate tightening torques.
		- Badly tightened supports, nuts or bolts	
17	Handlebars vibrate	- Worn tyre, swinging arm or needle	- Replace worn parts with new ones.
		bearings.	- Centre rim.
		- Off-centre rim.	- Check rim spoke tension. Readjust if necessary.
		- Misaligned wheel.	- Tighten handlebar bracket and steering shaft nut to
		- Excessive tolerance in steering shafts.	appropriate tightening torques.
		- Loose handlebar bracket and steering	- Tighten handlebar bracket and steering shaft nut to
		shaft nut.	appropriate tightening torques.



	FAULT	CAUSE	SOLUTION
18	Motorcycle tends to lean to	- Bent chassis.	- Change frame Go to a specialized workshop.
	one side.	- Incorrectly adjusted steering.	- Adjust steering Go to a specialized workshop.
		- Bent steering shaft.	- Change steering shaft Go to a specialized workshop.
		- Bent front fork.	- Change front fork.
		- Misaligned wheels.	- Align wheels.
19	Brakes do not work properly	- Worn disc.	- Change disc.
		- Loss of brake fluid.	- Check brake circuits. Change those that are damaged or
			broken.
		- Impaired brake fluid.	- Drain brake fluid and replace with new.
			Recommended by manufacturer.
		- Broken pump piston.	- Replace pump piston.
		- Incorrectly adjusted brakes.	- Adjust brakes.

Final thoughts



FINAL THOUGHTS

PREVENTATIVE ADVICE

Take the time to perform all necessary checks and maintenance on your motorcycle before taking it out for a ride. In some parts of this manual, information is provided about work to be carried out in a GAS GAS authorised garage. For this reason and in order to increase the life of your motorcycle, periodic checks of the motorcycle must only be carried out by experts in GAS GAS's After-Sales Service.



Failure to carry out proper maintenance of the motorcycle and ignoring problems, however small, can result in serious physical injury or even death.



To avoid excessive ageing of the plastic and other washable parts of the motorcycle, we recommend careful cleaning of them. If you use high pressure and/or temperature water equipment, take care to keep the water jet at least 30 centimetres away from the surfaces to ensure that the plastic stays shiny and the stickers that decorate the motorcycle are not removed.

SAFE OPERATION OF YOUR MOTORCYCLE

Safe riding of a motorcycle does not only depend on the machine. Also important are the prudence and intelligence of the rider. We recommend that you enjoy your favourite sport with the necessary equipment (helmet, pads and guards, boots, etc.).

LEGAL NOTICES

In the interests of technical development, we reserve the right to modify the construction, equipment and accessories of the motorcycle. Measurements, weight and power data are understood to include the respective tolerances. Depending on the amount of equipment and accessories of your motorcycle, as well as the export versions, there may be variations regarding descriptions and illustrations, meaning that the photographs shown in this manual may not correspond to the model purchased. Because of this, there can be no liability except in cases of error, misprint or omission.

GAS GAS reserves the right to make changes and/or modifications without prior notice.



