MANUAL DE USUARIO USER MANUAL MANUEL D'UTILISATEUR BENUTZERHANDBUCH MANUALE DELL'UTENTE

# TRIAL **2020**

125cc/250cc/280cc/300cc





**MOTORCYCLES & E-BIKES** 







## **MOTORCYCLES & E-BIKES**



125cc/250cc/280cc/300cc





## Welcome to JOTAGAS

Thank you for the confidence you have shown in our brand by purchasing this motorcycle designed for Trial.

As a JTG user, you will enjoy a product that offers innovation where strictly necessary, without excesses, incorporating characteristics such as quality, prestige and exclusivity.

Designed by off-road professionals to offer comfortable and effective service without forgetting a competitive spirit, that will enable you to experience the performance of a winner, ready at your disposal.



## **JTG ADVISES YOU:**

Please read this user manual carefully before using your motorcycle. In it you will find all the instructions necessary for correct operation of the machine as well as for your own safety, enabling you to attain optimum maintenance and service life from the very first day.

Please pay special attention to notes bearing these symbols:



ATTENTION! This symbol refers to aspects which if ignored could cause damage to your motorcycle. Non-observance of these warnings could render the guarantee void.



PRECAUTION! This symbol refers to aspects which if ignored could result in physical danger to the user.

In addition to the specific warning notes, this manual also contains other tips for better use of your motorcycle as well as better adjustment and control of important features of the vehicle.

JTG reserves the right to modify this manual.



## **JTG RECOMMENDS:**

- In case of any doubt as to possible adjustments of your motorcycle, please follow the instructions contained in this manual and/or contact an authorised JTG dealer.
- Please read the information contained in this user manual and familiarise yourself with the features of you vehicle before driving it at maximum power.
- It is recommended to establish an initial running-in period of at least 8-10 hours for the engine to bed in during this period do not drive at high speed or full throttle. The first hours of use should be at moderate speed only.
- Fuel is highly inflammable. Take care when refuelling and always stop the engine first.
- Before running the engine at high speed, it is important to have reached an optimum operating temperature, especially when starting up the motorcycle or in low temperature conditions.
- This motorcycle uses synthetic two-stroke oil mixed with 98-octane fuel in a 1% proportion. Do not use an other type of lubrication without first consulting with an authorised JTG mechanic.
- This motorcycle is designed to carry only one person; it is not permitted to carry a passenger. For the longest possible service life, keep the motorcycle maintained according to the recommendations in
- this manual.
- This vehicle has been designed for safe riding, as long as the rider is equipped with the necessary safety gea (Helmet, body protection, etc.). Take care and ride in a sensible manner.

# JOTAGAS

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## **DESCRIPTION OF PARTS**





- **1- Clutch lever**
- 2- Indicator, horn and stop
- buttons
- 3- Brake lever
- **4- Accelerator**
- 5- Radiator cap

- 6- Fuel tank cap
- 7- Starting pedal
- 8- Fuel tank
- 9- Radiator
- 10- Radiator drainage bolt
- 11- Sump oil level peep hole

- 12- Rear brake pedal
- 13- Engine breather
- 14- Fuel tap
- 15- Reed valve
- 16- Transmission chain
- 18- Gear change pedal



- **19- Front fork**
- 20- Spark plug
- 21- Silencer
- 22- Swing arm
- 23- Exhaust pipe
- 24- Water pump

- 25- Front mudguard
- 26- Front brake caliper
- 27- Ignition cover
- 28- Air filter cover
- 29- Carburettor
- **30- Centre stand**

- 31- Rear sprocket
- 32- Speedometer
- **33-** Front suspension adjustment
- 34- Footrests
- 35- Rear mudguard





## TECHNICAL DATASHEET

#### CHASSIS

Type: Double beam with lateral suspension system and built-in fuel tank

#### TYRES

Front: 2.75 x 21" - 44 (160 kg) L

Rear: 4.00 x 18" - 52 (200 kg) - L

#### SUSPENSION

Front: Hydraulic telescopic fork

(175 mm travel)

Rear: V3 progressive system with OLLE mono adjustable shock absorber (175mm travel)

#### BRAKES

Front: Disc, Ø185 mm, 4-piston caliper

Rear: Disc, Ø150 mm, 2-piston caliper

#### ENGINE

Type: Two-stroke, single cylinder, reed valve admission directly to the engine block, liquid cooled.

Cubic capacity: 301.58 cc

Piston diameter: 80 mm

Stroke: 60 mm

Carburettor:

Lubrication system: 1% mixture (1:100)

Ignition: Digital CDI HIDRIA

Spark plug: NGK BPMR6A

Generator: 12V / 110W

#### TRANSMISSION

ENGLISH



Type: 5-speed with hydraulically operated clutch. Secondary transmission: Chain. Gear ratios:

1 <sup>st</sup> 3.000 (33/11)
2 <sup>nd</sup> 2.571 (36/14)
3 <sup>rd</sup> 2.187 (35/16)
4 <sup>th</sup> 1.444 (26/18)
5 <sup>th</sup> 0.889 (24/27)
Primary reduction 2.778 (75/27)
Final reduction 4 (40/10)
Total ratio (5 <sup>th</sup> gear): 9.879

Transmission oil: cc, type GEAR TRANS OW75

#### DIMENSIONS

Overall height: 1160 mm Overall width: 833 mm Seat height: 650 mm Wheelbase: 1180 mm Fuel capacity: 2.7 litres Dry weight: 64 kg



## **VEHICLE INFORMATION**

# MANUFACTURER'S IDENTIFICATION PLATE (Under the fuel tank)

This plate contains information regarding vehicle certification, take note of this for easy identification of your vehicle, when needed.

#### SERIAL NUMBER AND KEY CODE

These numbers identify your motorcycle and the steering lock, take note of them in this manual (e.g. for ordering new keys if you lose them).



We recommend you take note of the serial number and identification data of your motorcycle for use in case of theft or to order spare parts.



- **1- MANUFACTURER'S IDENTIFICATION PLATE**
- **2- CHASSIS NUMBER**
- **3- KEY CODE**

(Supplied with the keys)



## STARTING AND STOPPING THE ENGINE



To start the motorcycle, first make sure that the fuel tap is open and that the gearbox is in neutral or if not, that the clutch lever is pulled in.

Then push the starting pedal, located on the right-hand side of the motorcycle. It will also be necessary to use the choke when starting from cold.

To stop the engine, select neutral and press the stop button on the handlebar.

## THE CHOKE

Use the choke when the engine is cold to start without causing damage to the engine. This device, when used properly, will avoid excessive wear and mechanical damage when starting in cold temperature. To activate it, lift the black lever on the carburettor.





## **GEAR CHANGE**



The gear change is controlled by a pedal on the left-hand side of the vehicle, the sequence is as indicated in the illustration. At the same time as you change gears you must disengage the clutch by pulling in the clutch lever on the left-hand side of the handlebar. The gearbox is sequential, i.e., to change from  $2^{nd}$  to  $4^{th}$  gear you must first go through  $3^{rd}$  gear.

**FUEL TAP** 



The fuel tap is under the fuel tank.

For the fuel to flow, the tap must be in the ON position. For reserve, select the RES position and to shut of the flow, leave the tap lever in an intermediate position between ON and RES.



### **FUEL TANK**



This motorcycle's fuel tank is built into the chassis, more specifically the upper part of the chassis. It holds 2.7 litres of fuel which should be lead free petrol with two-stroke oil in the proportions specified on the technical datasheet. The tank cap is at the top of the tank.

#### Petrol minimum octane rating: 98 octanes



Important. Do not mix vegetable and mineral oil. Respect the specified levels and proportions for correct combustion. For a homogeneous mix, first pour the oil into a container and add some petrol, shake and then add the mixture to the rest of the petrol. Avoid mixing at low temperature, as this will make the operation more difficult.





## **TYRES**





Tyres in good state will significantly contribute to your safety and will guarantee better driving behaviour. Make sure the pressures are correct at all times and check for wear. Pressure should be measured when the tyre is cold.

#### **TYRES**

Front wheel:

2.75 x 21" TRIAL

Rear wheel:

4.00 x 18" TRIAL

**RECOMMENDED TYRE PRESSURES** 

Front wheel:

0.45 bar (0.42 bar for competition)

Rear wheel:

0.35 bar (0.3 bar for competition)

When riding on low adherence terrain, you can reduce the pressure slightly in order to favour adhesion and vice-versa.



## BRAKES



You should regularly check the state of the front and rear brake pads as well as the brake fluid level. For your safety as well as precise and effective riding, do not use the motorcycle with excessively worn brake pads or brake fluid below the minimum level. If the brake pedal has a spongy feel, there may be air in the hydraulic system and it will need to be bled.



The brake fluid level can be checked through the peephole on the front master cylinder and the fluid reservoir of the rear master cylinder. The level must reach the middle, fill both reservoirs if necessary. Use D.O.T. 4 brake fluid.

There are bleed nipples on both circuits in order to eliminate air bubbles that could have entered the system after any work has been carried out.

The brake pedal must have some free play.





## **STEERING LOCK**



The steering lock is located under the lower front fork triple clamp.

To lock the steering, insert the key and turn the handlebars right as far as they will go, then press and turn the key anti-clockwise.

To unlock, insert the key and turn clockwise.

SIDE STAND



The side stand is on the right of the motorcycle, secured to the chassis with a spring. Move the side stand out as far as it will go in order to rest the motorcycle on it when stationary. Never drive with the side stand unfolded.





The left-hand side of the handlebar contains:

- Clutch lever.
- Horn.
- Engine stop button.
- Main/dip beam switch, and indicator switch.



The instrument panel is in the centre of the handlebar. (More information and instructions for use provided later in the manual)

## HANDLEBAR AND INSTRUMENT PANEL



The right-hand side of the handlebar contains:

- Brake lever
- Throttle



## ADJUSTING LEVERS AND THE HANDLE BAR



Both levers must have a **free play of 3 mm at the most**. This play must be present, do not eliminate it. To adjust, use the adjustment nuts located on the levers.

To adapt the handlebar to different types of riding, you can tilt it more or less by loosening the clamps that secure it to the fork. When adjusted as desired, tighten the bolts again, starting with the bolts closest to the seat and continuing with those closest to the speedometer.

## **CHECKING THE OIL LEVEL**



The engine holds **350 cc** of transmission oil. Try to keep the level between maximum and minimum levels for correct operation of the engine.

Do not mix oils of different types, always top **up with the** same oil. We recommend OW 75 GEAR TRANS type oil.



#### Oil change



Fig(a): Oil emptying plug

Fig(b). Oil filling plug

There is a plug at the bottom of the sump for emptying the oil **Fig(a)** and another plug at the top for filling **Fig(b)**. To change the oil, start up the cold engine and let it tick over for 5 minutes. This will heat the oil enough for changing.

Then place a tray under the engine and remove the oil plug. Let all the oil drain out and clean the plug removing any possible metal filings. When it is clean refit and fill with new oil through the upper filling plug orifice, until it reaches the correct level in the peep hole.

## **AIR FILTER**





After removing the filter, it can be cleaned using a specific degreaser, then washed with water and detergent, let the filter dry and then coat it with special air filter oil. It is recommended to check the state of the air filter regularly, to avoid problems due to particles in the admission. Make sure you clean it in a ventilated place, without sparks nearby and do not use petrol for cleaning, as this could cause an explosion.

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## **COOLING SYSTEM**





Do not forget that the radiator can get very hot, when manipulating, take care and let it cool down after switching off the engine.

Always use coolant (-30°C) for alloy engines when topping up the radiator.



Regularly check the radiator inlet and outlet tubes for impacts, cracks or leaks that could compromise the cooling. Also check the radiator alloy fins.

For correct operation of the engine, make sure the level of the coolant is correct. You can top up the radiator tank (preferably with the recommended coolant) through the cap at the top.

Do this with the engine cold and the motorcycle upright, first open the cap partially by turning anti-clockwise and let



any steam escape. Then open the cap completely and top up the fluid (if necessary) until it is just below the rubber.

The coolant supplied in the factory is a permanent mix of ethylene glycol, diluted in distilled water at 50% concentration and with anticorrosion additives.

It is recommended to change the fluid after some time in use and bleed the system. Pay attention to any abnormal colour of the fluid: white particles (corroded aluminium), brown particles (corroded steel parts), and be respectful with the environment, do not pour the fluid into inadequate places.

There is a thermal switch at the bottom of the radiator; its job is to control the temperature of the liquid in the cooling circuit. This device should be in correct working order in order to avoid possible damage to the engine.

## CARBURETTOR

The carburettor should be checked after a certain time cleaning it and drying with compressed air so as to improve its performance.

Check the height of the float that maintains the level of petrol in the carburettor and adjust it so it remains at 17mm within the specified margins.





When manipulating the carburettor and adjacent parts there may be traces of fuel that must first be drained. This fuel is inflammable and toxic, take care.



#### **Air-fuel mixture**

An optimum petrol-air mixture will enable you to obtain the maximum performance from your engine. For this purpose, the amount of air and fuel entering the carburettor must be adjusted. A good way discover the quality of the mixture is to inspect the spark plug. If the spark plug has a light brown colour, the mixture is correct; if it is black there is an excess of fuel, and if it is white there is an excess of air, in both cases the mixture entering the engine is incorrect.

To a djust the amount of petrol reaching the engine, you can modify the position of the main jet, which has a scale where the larger numbers indicate greater passage of petrol. You can also control the mixture with the air adjustment screw. Screwing in to enrich the mixture and vice-versa.

## **ADJUSTING THE TICK OVER**



There are two screws on the carburettor that can be used to adjust the tick over: The air adjustment screw and the tick over screw, that will enable you to change the speed of operation if necessary.



## **REED VALVE BOX**



Admission is through a reed valve, the state of which has a significant influence on the performance of the engine. Whenever the carburettor is removed for cleaning, make sure the reed valves are not worn and if so, replace the box with a new one.

## **TRANSMISSION CHAIN**







Correct tension of the chain should allow **a play of approximately 10-15 mm** in the area between the frame and the tensioner.

To tension the chain, first loosen the rear wheel axle nut and then adjust the chain using the tensioner adjustment bolts, which are in the swing arm. When adjusted, retighten the rear axle nut, paying special attention to the alignment of the chain, ensuring that it is not twisted.



Take care with this adjustment. A misaligned rear wheel axle or with the nut loose could cause an accident.

Keep the chain lubricated for optimum service life, preferably using viscous oil, for longer life.

## **SUSPENSION**



The front fork can be adjusted with the bolts at the top of the fork. **Turning the bolt on the left-hand fork tube you can adjust the compression and it you turn the bolt on the right-hand tube you adjust the extension**. Choose the best option according to your needs, always bearing in mind that the left and right-hand cylinders must be adjusted to the same level and perfectly aligned.



The preload of the spring can be adjusted by turning the castellated nut at the base of the shock absorber. It is also possible to adjust the hydraulic brake of the shock absorber with a bolt at the top. This bolt must be **in the middle of its travel** in normal adjustment.

## SWING ARM





For correct maintenance of the rear suspension system and swing arm, it must be regularly dismantled for cleaning, checking and lubricating the internal bearings, as well as adjustment and lubrication of the chain. Make sure that all the parts are in perfect state and replace any worn components if necessary.



## MAINTAINING THE MOTORCYCLE

The greater the care given to the motorcycle, the longer its service life will be and the better it will perform. Check all the elements listed below and keep them clean and lubricated for optimum service:

#### LEVER ARTICULATIONS

#### **REAR BRAKE PEDAL**

**GEAR LEVER** 

FOOTRESTS AND SIDE STAND

#### **STARTER PEDAL**

THROTTLE

**STEERING COLUMN** 

TRANSMISSION CHAIN AND SWING ARM ARTICULATIONS

**CHAIN TENSIONER** 



## **SPEEDOMETER**

These are the most important features of the control panel and speedometer fitted to your motorcycle:







These are its features:

Max. speed	Overestimation	Resolution	Updated	Impulses/revolution
300 Km/h (186 Mph)	4% constant	1 Km/h (1 Mph) E	very 500ms 1	

The basic functions (Always visible and cannot be deselected from the setup menu) of the panel are:

- Current speed (SPEED)
- Total distance covered (ODO)
- Total time of vehicle operation (H)

#### **SPEED** function

This information is always visible, regardless of the status of the vehicle (stationary or in movement). The default configuration indicates Km/h.



If the speed of the vehicle exceeds 110 km/h for more than 20 consecutive seconds, the status on the right-hand illustration will be displayed flashing. This signal will continue until the speed of the vehicle drops below 110 km/h for at least 10 consecutive seconds.



#### **ODO function**

This information can only be seen by pushing the MODE button, regardless of whether the vehicle is stationary or in movement. The predetermined configuration indicates Km and each Km is permanently stored in the in the memory.

#### **H** function

This function indicates the hours the vehicle has been in operation and can be seen by pressing the MODE, button, regardless of whether the vehicle is stationary or in movement. The counter associated with this function only works when the vehicle is in movement, on receiving the first impulse from the speed sensor, and it stops 3s after receiving the last impulse from the sensor.

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#### Clock function (CLK)

This function indicates the current time in "hh:mm:ss" format. The clock remains active even when Sleep Mode is activated.



The time can only be set when the vehicle is stationary, pressing the MODE button several times until the display screen is as illustrated above. When the CLK mode is displayed, pressing the MODE button for a few seconds, the active digits will begin to flash (In this order: hours, minutes, seconds and in display mode), which can be modified with the UP and DOWN buttons, and select with the MODE button. In time configuration mode, if 20 seconds pass without pressing any button or if the vehicle begins to move, the system will return to standard operational mode, saving the modified configuration.



# Trip, Average speed and Automatic Chronometer functions (TR1, A1 and S1)

These functions indicate the partial distance covered, average time and the time the vehicle has been on the current trip. They are activated automatically and are displayed on the screen with the indicators TR1, A 1 and S1 respectively, displaying the distance covered in km, speed in km/h and time in hours, minutes and seconds by default.

#### Manual Stopwatch function(LAP)

This function enables you to activate or deactivate a stopwatch manually, either if the vehicle is stationary or in movement. To activate the stopwatch, press the UP button on the screen displayed below, and to deactivate, press the UP button again. To delete the average time, press the DOWN button.



For more information on the rest of functions of the system, go to:

http://www.jotagas.com



## TORQUE VALUES

ELEMENTS FASTENED	Nm
Swinging arm-Chassis	40-50
Upper shock absorber fastener	40-50
Lower shock absorber fastener	40-50
Front wheel axle	40-50
Connecting rods	40-50
Handlebar	25-30
Front mudguard bridge	7-10
Silencer	10-15
Rear wheel axle	40-50
Front brake caliper fasteners	25-30
Exhaust pipe fasteners	10-15
Engine fasteners	30-35
Rear brake master cylinder fasteners	7-10
Spark plug	11
Ignition fasteners	7-8
Clutch fasteners	20-25
Cylinder stud fasteners	25
Reed valve fasteners	7-8
Clutch spring fasteners	3-4
Sump fasteners	7-8
Water pump cover fastener	7-8
Clutch cover fasteners	7-8

Flywheel fasteners	40
Ignition cover	7-8
Sump drain plug	12
Starter pedal bolt	12-13
Gear change pedal bolt	7-8
Cylinder head nuts	12-13



## **STORAGE**

If it is necessary to store the motorcycle for a long period of time, the following operations are recommended before storage:

- Clean the whole vehicle.
- Lubricate or grease the components that need it.
- Empty the fuel tank. (Take care with the fuel, which is inflammable and toxic)
- Empty the sump, removing the old transmission oil and refilling with new oil (If the engine is cold, it is recommended to start up and leave running for a few minutes to warm up the oil and favour draining).
- Cover the exhaust with a plastic bag, protecting it form the elements.
- Any unpainted metal parts that could get rusty should be coated with oil.
- Avoid the tyres touching the ground by placing a piece of cardboard or similar material under them.
- Protect the motorcycle as much as possible form dust and dirt by covering it with a plastic or canvas sheet.

When putting the motorcycle back into service, first:

- Remove the plastic protection used.
- Check the oil and lubrication of components.
- Check the spark plug.
- Adjust type pressure to the recommended value.
- Fill the petrol tank.



## **MAINTENANCE OPERATIONS**

(NOTE: Bear in mind that a clean motorcycle will facilitate inspection and detection of faults and wear)

COMPONENT	СНЕСК	ADJUST	REPLACE	CLEAN	LUBRICATE
Rear shock absorber	Annually		Every 2 years		
Front fork suspension oil			60h		
Transmission oil	30h		60h		
Brake adjustment	Every time it is used	Whenever necessary			
Spark plug		30h	60h	15h	
Swinging arm and connecting rods	Every time it is used		If damaged	Every time it is used	Whenever it is cleaned
Transmission chain	Every time it is used	Whenever necessary	If damaged	Every time it is used	Whenever it is cleaned
Throttle cable and twist grip	Every time it is used	Whenever necessary	If damaged	Whenever necessary	Whenever it is cleaned
Reed valve box	30h		If damaged	Every time it is used	
Carburettor		Whenever necessary	If damaged	Every time it is used	
Chassis			If damaged	Every time it is used	



	Every time		If damaged In case of a		
Clutch	E		If damaged		
Clutch					
Clutch plates			If damaged		
Brake discs	Every time used	First 5h	If damaged	Every two uses	
Brakes	Every time used	Whenever necessary	If damaged		
Cylinder head and cylinder	60h		Annually		
Rear sprocket	30h	First 5h	If damaged		Every time it is cleaned
Engine bearing			If damaged If damaged		
Piston bearing			If damaged		
Steering bearing			If damaged		
Carburettor jet		Whenever necessary	If damaged		



Coolant		Whenever necessary	Annually		
General lubrication	Every time used			Every time used	Every time it is cleaned
Front and rear wheel			If damaged	Every time used	
Tyres	Every time used		If damaged	Every time used	
Brake fluid level		Whenever necessary			
Chain guide slipper			If damaged		
Starter pedal and gear change pedal			If damaged		Every time it is cleaned
Brake master cylinder piston and dust cover			If damaged		
Brake piston and dust cover			If damaged		
Piston and rings	60h		Annually		
Front and rear wheels		5h	If damaged	Every time used	
Fuel system	Every time used		If damaged		
Front suspension		Whenever necessary	If damaged		
Exhaust seal			If damaged		
Nuts, bolts and other fasteners		Whenever	If damaged		



		necessary		
Detroltuke	Every time	Whenever	If domograd	
Petrol tube	used	necessary	n damaged	
Dedictor tube and joints	Every time	Whenever	If domogod	
Radiator tube and joints	used	necessary	ii uamageu	
Chassis protective adhesive elements			If damaged	
Sump protector			If damaged	



## HOMOLOGATION

All the components fitted in this vehicle comply with legal homologation requirements, including the identification marks on part that require them.

Pay attention to the component that are compulsory for using the motorcycle on public roads and must be present on the vehicle in order to pass the Vehicle Technical Inspection Test:

- Registration plate holder
- Speedometer
- Lighting system and reflectors
- Indicators
- Horn
- Rear view mirrors
- Steering lock
- Manufacturer's identification plate
- Air filter restrictor
- Exhaust system with catalyser
- Silencer
- Carburettor jets
- Side stand

IMPORTANT NOTE: The vehicle is also supplied with a RACING KIT containing additional components. Bear in mind that the modifications provided by this kit are NOT covered by the vehicle homologation.



		- Replace oil with correct density.
	- Oil with excessively low density.	- Adjust rear shock absorber.
	- Rear shock absorber badly adjusted.	
Handlebar vibration	- Worn tyre, swinging arm or bearings	- Take bike to a specialised workshop.
	worn.	
	- Rim out of true.	- Take bike to a specialised workshop.
	- Badly aligned wheel.	- Take bike to a specialised workshop.
	- Steering shafts, handlebar supports or	- Tighten nuts and fasteners to
	fasteners with play.	specified torque.
Brakes working badly	- Pads worn	- Change pads
	- Discs worn.	-Change discs.
	- Loss of brake fluid.	- Check circuits. Replace leaking parts
		and top up fluid to the correct level.
		- Remove brake fluid circuit and replace
	- Brake fluid in bad state.	with fresh fluid of the right type.
		- Replace master cylinder piston.
	- Master cylinder piston worn.	- Adjust brakes.
	- System badly adjusted.	
Fusing bulbs	- Voltage regulator problems.	- Check connections. Check voltage regulator and fuses.



Engine makes strange noises	- Ignition problems.	- Take motorcycle to an authorised
	- Overheated engine.	workshop.
		- Stop the engine and check the state of
		the cooling and exhaust systems.
Engine lacks power	- Admission problems.	- Clean the fuel admission system and
		air filter.
	- Exhaust system problems.	- Check for leaks in the system and
		clean or replace the silencer fibre.
	- Carburettor jets dirty.	- Remove the carburettor and clean
	- Damaged crankshaft bearings.	them.
	- Clutch slipping.	- Replace the bearings.
		- Check its adjustments. Take bike to a
		specialised workshop.
Exhaust gives off white smoke	- Water in the cylinder.	- Change the cylinder head O-ring.
	- Accelerator cable incorrectly adjusted.	- Check accelerator adjustment.
Exhaust gives off brown smoke	- Lack of air in the mixture.	- Clean or change the air filter.
	- Main jet too high.	- Check the main jet.
Explosions in the exhaust	- Carbon deposits in the combustion	- Clean the combustion chamber.
	chamber.	
	- Incorrect type of fuel.	- Empty fuel tank and refill with correct
		type of fuel.
	- Spark plug in bad condition or wrong	- Replace spark plug with correct type.
	type.	- Check state of gaskets and replace if
	- Exhaust system gaskets damaged.	necessary .
Clutch not working correctly	- No play in the clutch lever.	- Take bike to a specialised workshop.



	- Clutch worn.	
	- Clutch springs broken or weak.	- Take bike to a specialised workshop.
		- Take bike to a specialised workshop.
Gears engage badly	- Problems in forks, gears or additional	- Take bike to a specialised workshop.
	gearbox systems.	
Abnormal noises	- Worn or badly adjusted chain	- Adjust or change chain.
	- Rear sprocket teeth worn.	- Change rear sprocket.
	- Chain needs lubrication.	- Apply appropriate chain lubricant.
		- Take bike to a specialised workshop.
	- Badly aligned rear wheel.	- Add fork oil to the specified level.
	- Lack of oil in the front fork.	- Replace front fork spring.
	- Problems with the front fork springs.	- Replace brake disc.
	- Worn brake disc.	- Refit pads or replace.
	- Brake pads glazed or badly fitted.	
Unstable ride	- Steering shaft nut too tight.	- Loosen the steering nut a little.
	- Steering bearings worn or damaged.	- Replace bearings.
	- Bent steering shaft.	
		- Take bike to a specialised workshop.
Suspension too hard	- Too much oil in fork.	- Remove excess oil.
		- Replace oil with correct density.
	- Oil in fork too dense.	- Take bike to a specialised workshop.
	- Twisted or bent fork.	- Adjust tyre pressure.
	- Excessive tyre pressure.	<ul> <li>Adjust rear shock absorber.</li> </ul>
	- Rear shock absorber badly adjusted.	
Suspension too soft	- Low oil level in fork.	- Add the right oil to the specified level.



	- Oil with excessively low density.	<ul> <li>Replace oil with correct density.</li> <li>Adjust rear shock absorber.</li> </ul>
	- Rear shock absorber badly adjusted.	
Handlebar vibration	- Worn tyre, swinging arm or bearings	- Take bike to a specialised workshop.
	worn.	
	- Rim out of true.	- Take bike to a specialised workshop.
	- Badly aligned wheel.	- Take bike to a specialised workshop.
	- Steering shafts, handlebar supports or	- Tighten nuts and fasteners to
	fasteners with play.	specified torque.
Brakes working badly	- Pads worn	- Change pads
	- Discs worn.	-Change discs.
	- Loss of brake fluid.	- Check circuits. Replace leaking parts
		and top up fluid to the correct level.
		- Remove brake fluid circuit and replace
	- Brake fluid in bad state.	with fresh fluid of the right type.
		- Replace master cylinder piston.
	- Master cylinder piston worn.	- Adjust brakes.
	- System badly adjusted.	
Fusing bulbs	- Voltage regulator problems.	- Check connections. Check voltage
		regulator and fuses.