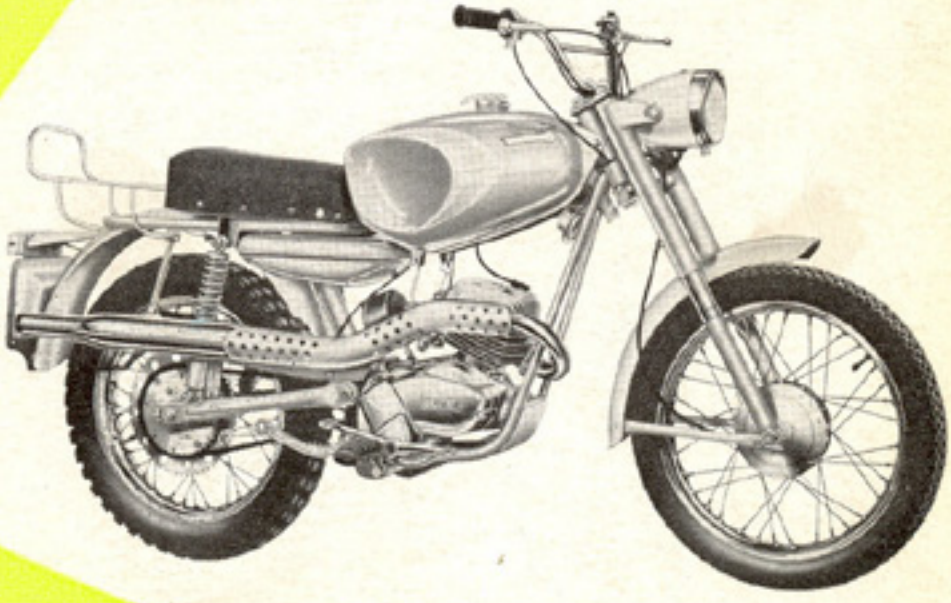
DUCATI MOPEDS
50 SL - 50 SL1 - 50 SL2
DUCATI LIGHTWEIGHT MOTORCYCLES
100 CADET
100 MOUNTAINEER

instructions for use
and maintenance



DUCATI MECCANICA S.p.A. - BOLOGNA - ITALY

Bevel Heaven PRINTED IN ITALY

Ducati Mopeds
50 SL - 50 SL1 - 50 SL2

Ducati Lightweight Motorcycles
100 Cadet
100 Mountaineer

SPECIFICATIONS - USE - MAINTENANCE

I Edition - PRINTED DM - Mod. 764/E - JUNE 1967

Every model is supplied with a copy of the present handbook.

GUARANTEE CARD

Every DUCATI model is supplied with a « Guarantee Card » contained in the tool box.

Dear Sir,

We are very glad to welcome you among our Customers, and feel sure that you will not fail to appreciate the magnificent performances of DUCATI 50 Mopeds and DUCATI 100 lightweight motorcycles.

The said models are the outcome of studies and long experience gained by DUCATI MECCANICA in both the construction of 4-stroke engines of little and medial cubic capacity and the study of frames for lightweight motorcycles. The vehicles derived from this experience are prominent for their qualities of sturdiness, comfort and low price, harmoniously merged with a typical smart line.

The model 100 Mountaineer can be used by hunters and fishers as well as by countrymen and farmers who often have to go along steep and uneven roads to get at their sport or work spot, respectively.

All the vehicles are cheap in both the purchase and service and they can be safely used. Everybody will find the satisfaction of any need in these models.

The cheapness of its using (fuel, tyre consumption, etc.) eliminates any competitor before DUCATI MODELS.

Furthermore the proverbial frame sturdiness and the excellent engine quality make practically paltry the cost for maintenance and repair.

The use of DUCATI MOTORVEHICLES is extremely simple, their road-holding excellent.

DUCATI MECCANICA assures you that every engine delivered by the Factory has been strictly tested, and therefore, if the instructions contained in this booklet are scrupulously followed, the mechanical parts of engine and frame should not, normally, undergo damages of a certain importance.

At any rate we warmly recommend you always to apply, for any possible overhauling or repair, to the DUCATI SERVICE STATIONS and to the WORKSHOPS OF THE DUCATI DEALERS.

If you wish your engine to be always efficient, you should — in case of repairs requiring the replacement of spares — always insist to have DUCATI ORIGINAL SPARES.

With our thanks and congratulations for the happy choice you made with this model, please accept also our best wishes to remain for many years very proud to own a DUCATI MODEL.

DUCATI MECCANICA S.p.A.

MOPED DUCATI 50 SL

MOPED DUCATI 50 SL 1

MOPED DUCATI 50 SL 2

MOTORCYCLE DUCATI 100 CADET

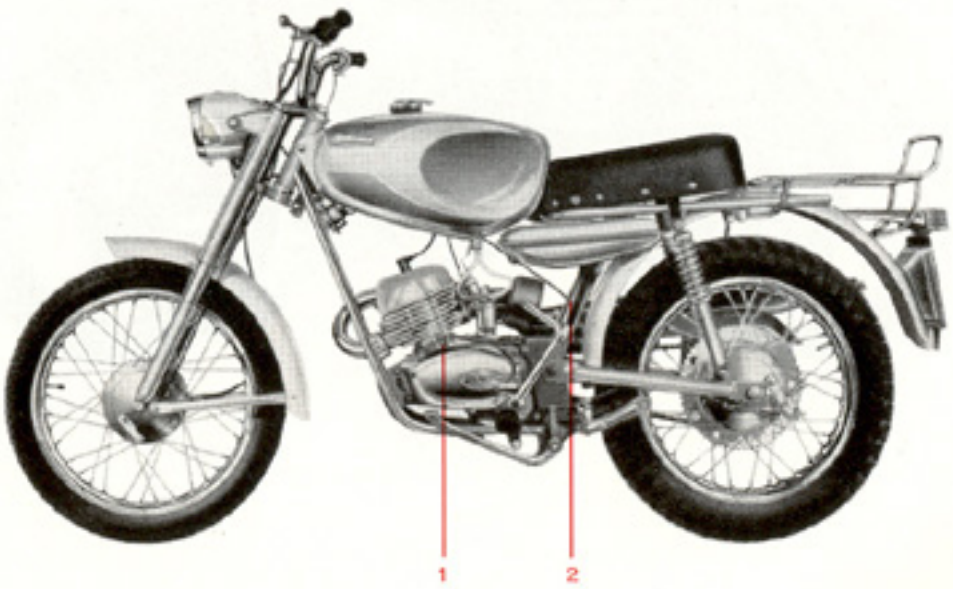
MOTORCYCLE DUCATI 100 MOUNTAINEER

IDENTIFICATION NUMBERS

Every DUCATI VEHICLE is identified by its respective frame and engine serial number.

The frame serial number is stamped on the central girder near the toolbox.

The engine serial number is stamped on the half-crankcase, clutch side, near the cylinder.



1 - Engine serial number

2 - Frame serial number

PRECAUTIONS TO BE FOLLOWED DURING THE INITIAL RUNNING-IN PERIOD

In order to allow the exact and reciprocal « bedding-in » of all the mechanical parts of the vehicles and particularly not to interfere the long-lasting good working of the engine main parts, it is advisable, during the first period of use, not to force the engine nor to indulge too long at high revolutions, especially when travelling uphill.
To ensure a proper running-in of all moving parts, it is advisable to keep well within the maximum speeds resulting from the following table:

Distance travelled in Kms. or miles	Max. speeds allowed in Kms. and Miles per h.							
	in 1st speed		in 2nd speed		in 3rd speed		in 4th speed	
	50	100	50	100	50	100	50	100
Up to 500 Kms. (Italy)	5	10	9	20	16	35	22	50
Up to 500 Kms.	9	10	18	20	31	35	44	50
Up to 300 miles (Foreign Countries)	5,5	6	11	12	19	22	27	31
From 500 to 1000 Kms (Italy)	7	15	14	30	20	45	27	60
From 500 to 1000 Kms.	13	15	27	30	40	45	53	60
From 300 to 600 miles (Foreign Countries)	8	9	17	19	25	28	33	37

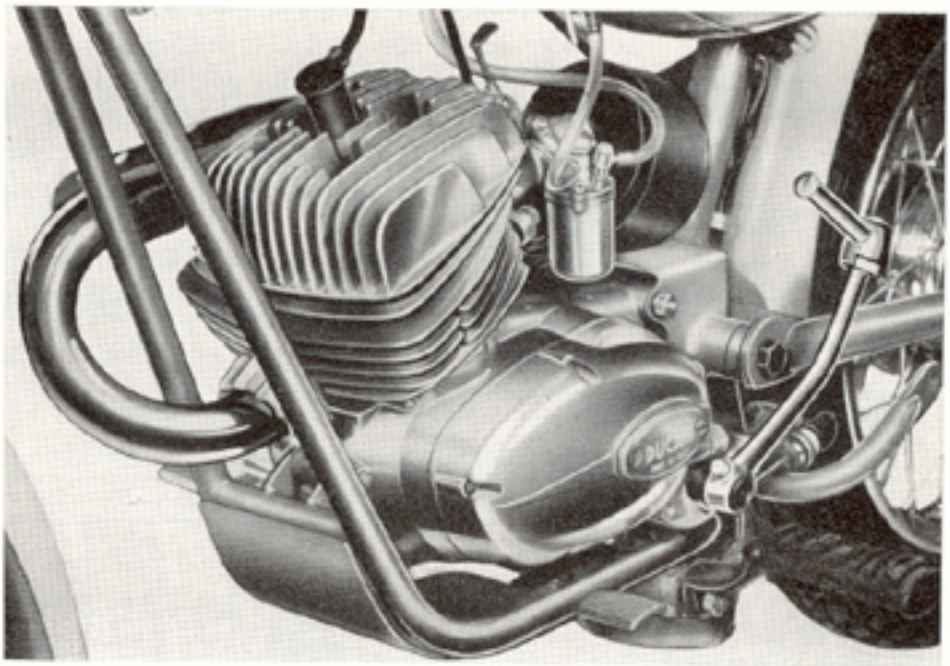
During the engine running-in period, care that the mixture is not lower than 6% of good fluid oil, density SAE 30; after this period a 5% of AGIP MAS mixture can be regularly employed.

Moreover, it is recommended, after the first 500 kms. (300 miles):

— to control the tightness of the nuts which fix the cylinder head and the cylinder barrel to the crankcase as well as all the other screws;
— to readjust the contact breaker housed in the flywheel magnet.

The more regularly and accurately the foregoing recommendations are followed, the longer will be the life of the engine and the fewer the overhauls and adjustments needed.

MAIN SPECIFICATIONS



NOTE: The figure shows the 100 cc. engine.

ENGINE — Single cylinder, two stroke; with cylinder axle inclined forward 25° from the vertical;

Model	Bore mm. (inch.)	Stroke mm. (inch.)	Cylinder cubic capacity cc. (cu. in.)	Compression ratio
50 Italy	38.8 (1.53)	42 (1.65)	49,660 (3.03)	1 : 7
50 Abroad	38.8 (1.53)	42 (1.65)	49,660 (3.03)	1 : 11
100	52 (2.05)	46 (1.81)	97,690 (5.96)	1 : 11,2

— combustion chamber with hemispherical ceiling;
— cylinder in chromium plated aluminium;
— connecting rod in special steel with SKF rollers at the big-end (crank pin) and with bronze bush at the little-end (gudgeon pin);
— BORGO convex topped piston, made of special light alloy, with skirt in one piece and two piston rings;
— cylinder head cast in light alloy and closely finned.

TIMING

The timing is with crossed lights.

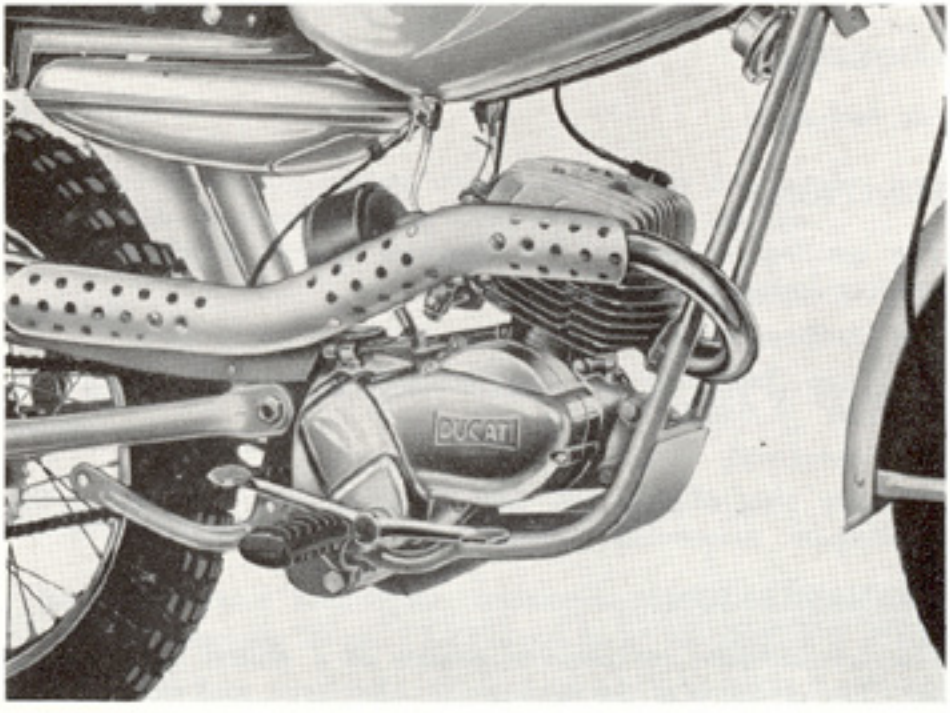
PETROL FEED

The petrol is fed to the carburetor by gravity.

Carburetor Dell'Orto SHA 14-12, with built-in suction silencer and filter F27 for 50 Italy; Dell'Orto UA-18-S with induction cone for 50 Foreign Countries, Dell'Orto UBF-24-BS with air intake filter F 35/1 for 100.

The adjusting data for the carburetors are:

Model	Carburetor	Diffusor mm. (inch.)	Atomiser	Throttle valve n.	Tapered pin	Tapered pin fixing slot	Jets	
							main n.	idling n.
50 Italy	SHA 14,12	12	—	6108.01.64	2638	—	52	—
50 Abroad	UA-18-S	18 (0.71)	260 F	55	D10	I	85	40
100	UBF 24 BS	24 (0.94)	260 A	70	E2	II	102	40



The tank, having a capacity of litres 11,600 = 2.5517 imp. gal. = 3.0644 U.S. gal. (50SL - 100C - 100M), litres 9,600 = 2.1118 imp. gal. = 2.5360 U.S. gal. (50SL1), litres 10,700 = 2.3540 imp. gal. = 2.8269 U.S. gal. (50SL2), is supplied with two 3-position taps: closed-open-reserve.

The reserve is of about 2,000 litres = 0.4400 imp. gal. = 0.5284 U.S. gal.

LUBRICATION

The gearbox and the clutch are automatically lubricated by the oil contained in the engine crankcase.

The gearbox and clutch gears allow the inner circulation of the oil in such a way as to lubricate all the parts of the engine.

The oil returns by gravity.

When the oil (AGIP F.1 MOTOR HD SAE 30) is replaced in the crankcase, bear in mind that its oil content is of Kg. 0.250 (lb. 0.5512) corresponding to litres 0.300 (0.0660 imp. gal. = 0.0792 U.S. gal.) approx. for the 50, and of Kgs. 0.300 (lb. 0.6614) corresponding to lts 0.360 (0.0792 imp. gal. = 0.0951 U.S. gal.) approx. for the 100.

To pour the oil in the crankcase, take out the cover on the left side of the engine. The right level is obtained when the oil is about 5 mm. (0.1968") under the lower rim of the opening.

COOLING

Air cooling.

IGNITION

The ignition is made by the flywheel magnet which is of the rotating inductor type.

The ignition advance is fixed and equal to 24° ÷ 26°.

The gap between the breaker points is 0.3 ÷ 0.4 mm. (0.0118" ÷ 0.0157").

H.T. outer coil.

Sparking plug Marelli CW 260 N, or similar type during the running-in; afterwards, normal hard Lodge 3HN.

TRANSMISSION

The transmission components consist of a clutch and a gear-box. The clutch is of the steel multi - plate type, and steel covered by a special bond, moving in oil bath; it is assembled on the gear change main shaft.

It is operated by the lever applied to the left side of the handlebar.

The transmission from engine to clutch-gearbox main shaft is by helical gears and the reduction ratio is 3.666 : 1 for the 50, 3.000 : 1 for the 100.

The gearbox has 4 speed gears and a neutral position: gears in constant mesh, operated by pedal.

The change gear ratios are:

in First speed: 3.27 : 1;
in Second speed: 1.94 : 1;
in Third speed: 1.35 : 1;
in Fourth speed: 1.04 : 1.

The transmission from gearbox to rear wheel is by chain and the speed ratio can have two values, 3.500 : 1 and 5.000 : 1 respectively with Z=42 and Z=60 sprocket. The Z=42 sprocket is particularly fit for the flat country, while the Z=60 sprocket is fit for the mountain (in the model Mountaineer).

In the models 50, and 100 Cadet, the said values are respectively: 4.083 : 1 and 2.800 : 1.

STARTING

The starting of the engine is obtained by an articulated lever with a gear in constant mesh with frontal free release.

FRAME

The frame is of double cradle tubular type of very smart appearance.

SUSPENSIONS

The front fork is long-stroke, telescopic, mechanic in oil bath (each leg contains 20 cc. (1.2205 cu.in.) of AGIP F-1 MULTIGRADE.
The rear suspension consists of a swinging fork with half-hydraulic shock-absorbers, with uncovered spring.

WHEELS

The wheels have silver-plated spokes and chromium plated, polished steel rims, normal profile.

Tyres and inflating pressures:

Models	Front wheel				Rear wheel			
	Rim	Tyre	Inflating pressure		Rim	Tyre	Inflating pressure	
			Kg./cm²	lb/sq in			Kg./cm²	lb/sq in
50	1.35"x19"	2.1/4"x19" Knobby	1.75	24.89	1.35"x19"	2.1/4"x19" Knobby	2.25	32.01
100 C	2"x18"	2.1/4"x18" ribbed	1.75	24.89	2"x18"	2.50"x18" Knobby	2.25	32.01
100 M	2.1/4"x16"	2.1/2"x16" Knobby	1.75	24.89	1.85"x16"	3.25"-3.50"x16" Knobby mot.	2.25	32.01

Both wheels have removable axles, the rear one has also a special spring drive.

BRAKES

The brakes are of the expanding type with two brake-shoes; diameter of the drums: 118 mm. (4.6457"); width of the shoes: 20 mm. (0.7874"); hand operated the front one, by pedal the rear one.

SADDLE

Single - seat saddle in 100 Mountaineer; 2-seat saddle in the other models, very confortable and particularly fit for long travels.

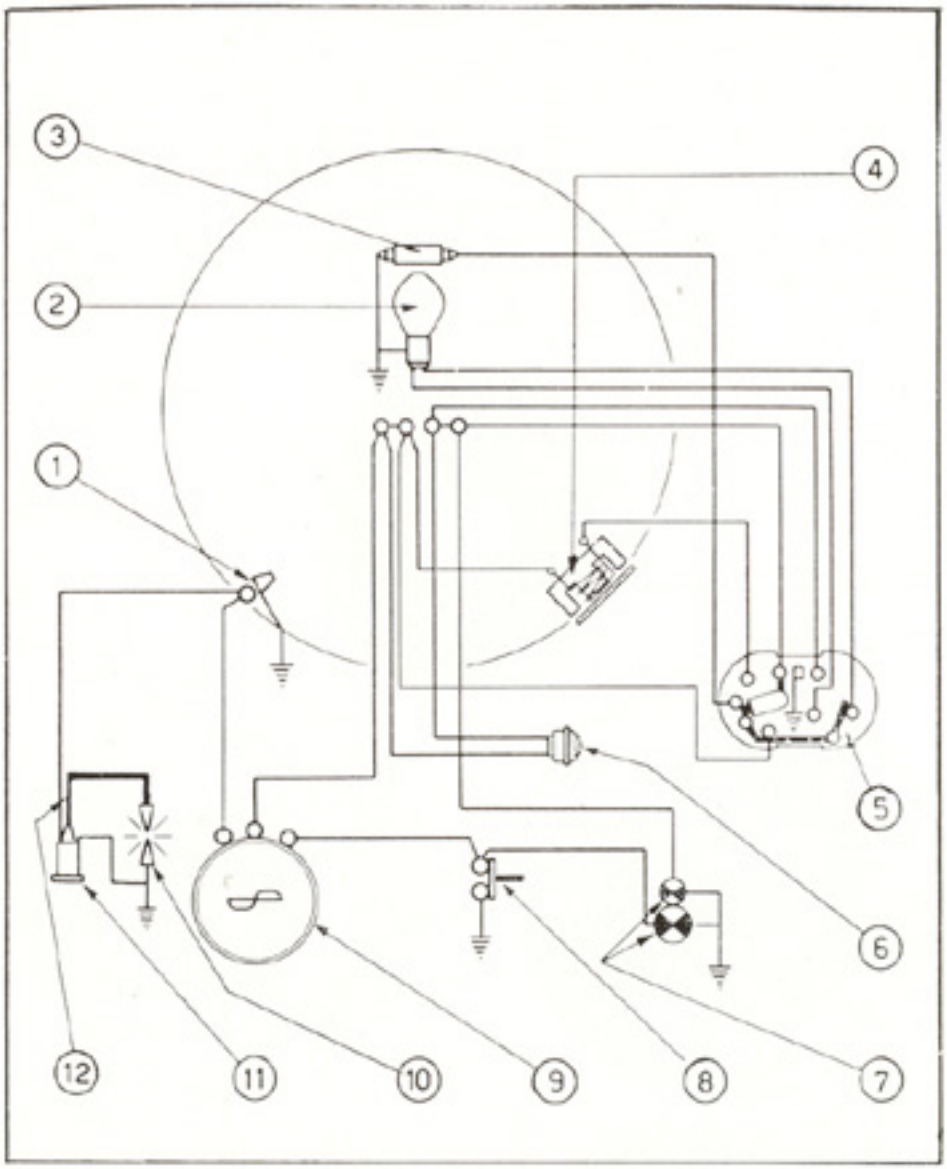
TOOL BOX

Under the saddle there is a big toolbox.
To have access to the toolbox, unscrew first the filter of the carburetor, if necessary.

PLATE HOLDER

On the rear mudguard, in the right position, there is the plate holder in the 100 models, and only the tail light in the 50 models.

PLAN OF THE ELECTRICAL SYSTEM IN THE 100 CADET and 100 MOUNTAINEER ELECTRICAL SCHEME « APRILIA »



KEY TO PARTS OF THE ELECTRICAL SCHEME

1 - Mass button
2 - Front headlamp 6V - 25/25W
3 - Town light bulb 6V - 3W
4 - Blade impeding coil
5 - Commutator for lights - horn push button- lightdeviator
6 - Horn
7 - Two light bulb 6V-3/15W
8 - Stop switch
9 - Generator 6V - 30 + 15W
10 - Ignition sparking plug
11 - H.T. coil
12 - Ignition cable

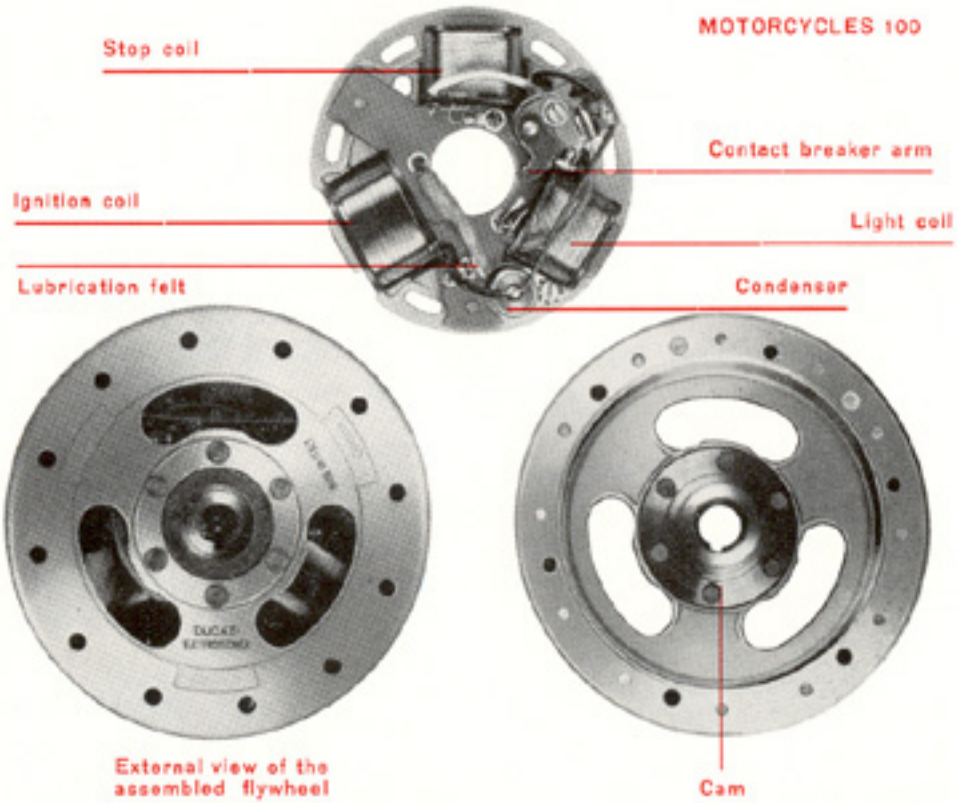
ELECTRICAL SYSTEM

The engine for all the models has an alternator flywheel magnet with an outer High Tension coil.

The light feeding coil has an output of 18 + 15 W for the 50, 30 + 15 W for the 100.

The different parts composing this generator are:

1) the rotating flywheel itself which comprises: the magnets with their polar expansions, the drum which supports them and the hub which retains the cam;
2) the stator plate which comprises: rotors, their respective magnetic cores, the contact breaker, the condenser and the leaf spring holding the lubricating felt.



In the 50 cc., the front headlamp is with 2 lights: town light (6 V - 15 W) and anti-dazzle light (6 V - 15 W); the mass button stopping the engine is incorporated in the commutator. In the 100 cc., the front headlamp is with 3 lights: town light (6V - 3W) the dazzling light (6V - 25W) and antidazzling light (6V - 25W).

It incorporates the mass button stopping the engine.

On the handlebar, near the L.H. handgrip, is placed the 3-position switch for the light control together with the horn push button.

On the rear mudguard are fitted the red tail light (6V - 3W), the stop (6 V - 15 W) and the catarefractor for the 50.

For the 100 cc. on the plate-number holder is placed the tail light with the 2-light bulb 6V - 3/15W for the lighting of the plate-number and the stop light.

ELECTRICAL SYSTEM « CEV »

FOR THE 50

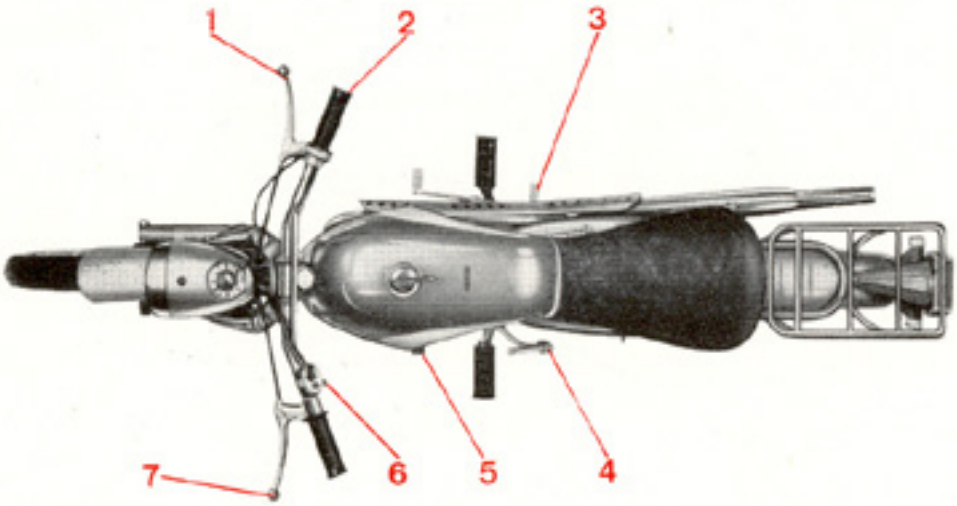
The electrical system of the 50 cc. is similar to that of the 100 cc. except for the number of the lights of the headlamp (see preceding description).

CONTROLS

On the left side half handlebar is placed the clutch operating lever, the commutator for lights, and the horn push button; the right side handgrip is movable and is employed to operate the accelerator; before it, is found the hand lever operating the front brake.

Near the left footrest is fitted the rear brake lever, which operates also the stop and the starting articulated lever.

Near the right footrest is fitted the double gearbox lever.

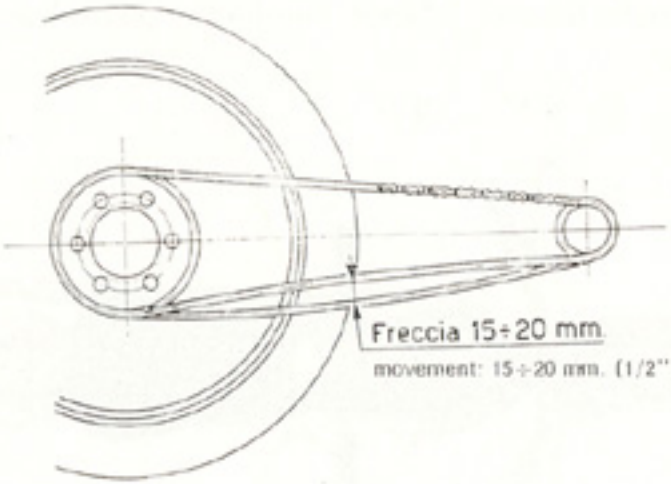


LEGEND

1 - Front brake control lever.
2 - Accelerator control handgrip.
3 - Change gear control lever.
4 - Starting lever.
5 - Rear brake control lever.
6 - Light switch - horn pushbutton.
7 - Clutch control lever.

ADJUSTING OF THE CHAIN TENSION

The chain must be slightly taut, (max. shaking 15 ÷ 20 mm. = 1/2" to 3/4") when the motorcycle is to the ground and loaded with one person on the rear of the saddle, or when the rear spring suspension is on half of its stroke.



REPLACEMENT OF THE SPROCKET in the MOUNTAINEER

To pass from riding obtained with the Z = 60 sprocket to the one with a Z = 42 sprocket, carry out what follows:

— Take out the small fork of one chain link.

— Take out the small fork of the other link.

— Detach the cut-down of 9 links and put the chain in the toolbox together with one link.

— By means of the hollow hexagon spanner Ch. 11 (0.4331") unscrew the 4 outer screws (those near the teeth of the sprocket Z = 42).

— Press the sprocket Z = 60 towards the middle of the wheel, detaching it from the 4 connections of the smaller sprocket.

— Let the greater sprocket rotate for 45° clockwise and anti-clockwise so that its threaded holes coincide with those of the connections of the small sprocket.

— By means of the hollow hexagon spanner. Ch. 11 (0.4331") tighten again the 4 screws together with their spring washers.

— Fit the chain on the small sprocket, with the link which remained.

On the contrary, to pass from riding obtained with the small sprocket, to that obtained with the greater one, proceed in the same manner as previously described, except that in this case the cut-down and the link put in the toolbox, have to be added, while the greater sprocket should be rotated so that the smaller sprocket connections enter the corresponding holes of the greater sprocket.

OVERALL DIMENSIONS AND WEIGHT

Denomination		50 SL mm (inch.)	50 SL1 mm (inch.)	50 SL2 mm (inch.)	100 Cadet mm (inch.)	100 Mountaineer mm (inch.)
Max. length	m.	1.770 (69.6849)	1.790 (70.4720)	1.770 (69.6849)	1.810 (71.2597)	1.830 (72.0471)
Max. width	m.	0.700 (27.5590)	0.580 (22.8346)	0.700 (27.5590)	0.700 (27.5590)	0.700 (27.5590)
Max. height	m.	1.000 (39.3700)	0.870 (34.2519)	1.000 (39.3700)	1.000 (39.3700)	0.980 (38.5826)
Height at the saddle	m.	0.730 (28.7401)	0.780 (30.7086)	0.730 (28.7401)	0.750 (29.5275)	0.760 (29.9212)
Wheel base	m.	1.150 (45.2755)	1.180 (46.4570)	1.150 (45.2755)	1.160 (45.6692)	1.170 (46.0629)
Weight	m. lb	65 143.300	61 134.482	61 134.482	65 143.300	68 149.914

SUPPLIED TOOLS

Tyre inflator.
Spanner for sparking plug ch. 21 (0.8268") with screwdriver.
Brush for sparking plug.

PERFORMANCE

MAXIMUM SPEED:

Models	in 1st speed Km/h. (m.p.h.)	in 2nd speed Km/h. (m.p.h.)	in 3rd speed Km/h. (m.p.h.)	in 4th speed Km/h. (m.p.h.)
50 Italy	12	21	30	40
50 Foreign Countries	24 (13)	42 (26)	60 (37)	80 (50)
100 Cadet	27 (17)	47 (29)	67 (42)	90 (56)
100 M	—	—	—	—

Consumption:

Models	Saving speed of km/h (m.p.h.)	1 litre of AGIP MAS mixture at	Every Kms (miles)
50 Italy	30 ÷ 35	5%	50
50 Foreign Countries	35 ÷ 40 (22 ÷ 25)	5%	47 (29)
100	40 ÷ 45 (25 ÷ 28)	5%	46 (29)

Fuel distance:

— 50 Italy: about 580 Kms. (for 50 SL: for SL1 and SL2 slightly fewer Kms.).
— 50 Foreign Countries about 545 Kms. (338 miles).
— 100 about 534 Kms. (332 miles).

Maximum gradient which can be overcome:

Models	in 1st speed	in 2nd speed	in 3rd speed	in 4th sped
50 Italy	22%	17%	9%	7%
50 Foreign Countries	24%	19%	10%	7%
100 Cadet	25%	20%	11%	7%
100 M.	practically without limits			

HOW TO USE THE VEHICLE

FILLING UP AND STARTING THE ENGINE

Before starting the engine make sure that there is sufficient petrol in the tank, for the distance you wish to travel. See that the petrol cock is open and that the engine lubricating oil is at the right level.

We recommend to use AGIP F. 1 MOTOR HD SAE 30.

Having refuelled and checked the oil, see that the gear handgrip is in neutral position and press down the carburetor tickler to ensure the arrival of the mixture in the float chamber.

Now, turn the throttle handgrip for about one third of its travel, and press down the starter pedal.

If the engine does not start, execute again this operation opening more or less the throttle handgrip, but avoiding to press the carburetor tickler not to cause the carburetor being overflooded and the sparking plug turning dirty.

Once the engine has started, do not let it, at once, run at a very high number of revolutions, especially when it is cold; in this manner you will allow the oil to be warmed up, to easily circulate throughout the ducts and to reach all the moving parts which are to be lubricated.

STARTING AND SETTING THE VEHICLE IN MOTION

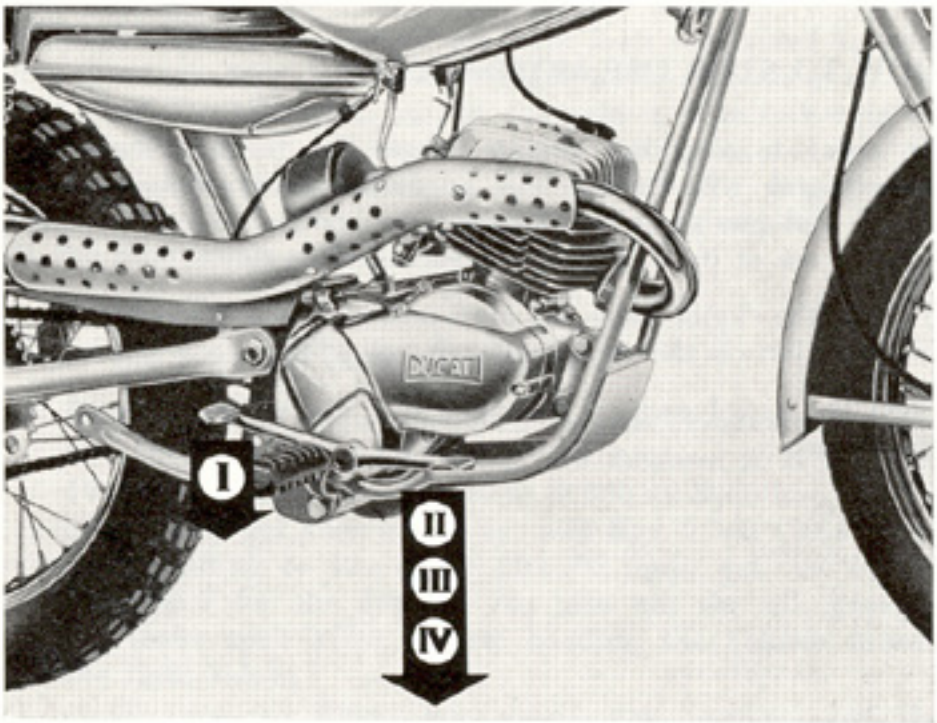
Once the engine is running, to set the vehicle in motion, it is necessary to disengage the clutch and to push downward with the heel the gearbox lever rear arm. This lever, once loose, will return to the starting position. After effecting this operation, the first speed will be engaged. Now slightly open the throttle handgrip and slowly release the clutch lever; the vehicle will move.

Once the clutch lever has been completely released, let your

vehicle move at a speed of 10 ÷ 15 Km/h (6 ÷ 9 m.p.h.) and then, to pass to the 2nd speed, quickly close the throttle, draw immediately after the clutch lever and push downward the gearbox lever front arm.

Open again the throttle and release the clutch.

To pass from the 2nd to the 3rd speed and from the 3rd to the 4th speed, execute again this operation.



To pass from the top speeds to the bottom ones, proceed as follows: close the throttle, draw the clutch lever, accelerate the engine for a while so as to allow the inserting gears to be synchronized, engage the lower gear and at last release the clutch lever.

A good motorrider will make use of the controls in an intelligent manner and at the right time; when riding uphill and the engine tends to slow down, he will change to a lower gear at once; he will not hang on to a high speed when the effort required from the engine advises to use a lower gear.

The clutch should not be held longly disengaged with a gear engaged, because the clutch plates will become overheated

and as a consequence a rapid wear of the material will be caused by friction.

Except in case of emergency, never use the brakes brutally when you are already near the obstacle, but throttle down the engine first, and then make use of the brakes. Bear in mind that insufficiently inflated tyres weaken the roadholding qualities of the vehicle, cause a greater tyre wear and lower brake efficiency.

HOW TO STOP THE MOTORCYCLE

In order to stop the vehicle, close the throttle completely (the engine will then act as a gentle brake), disengage the clutch and put the gear change lever on the neutral position; a slight use of the brakes will then stop the vehicle.

To stop the engine press the mass button on the front headlamp for the 100, on the commutator for the 50.

Close the petrol cock, if the vehicle is not to be employed for some time.

MAINTENANCE

On good maintenance depends the good condition of the vehicle. By following the hereinafter fundamental directions you can avoid serious trouble and obtain an excellent performance from your vehicle.
The operations to be carried out have been subdivided in such a way as to take into consideration their succession on the ground of the kilometers run by the vehicle. The following recommendations are, of course, merely indicative, because the need of lubrication, checking and adjustment depends on the nature of the road, the seasonal temperature, the length of the intervening period, a.s.o.

After the first 500 Kms. (310 miles)

— Replace the oil contained in the engine crankcase (AGIP F. 1 MOTOR HD SAE 30) in the measure of Kgs. 0.250 (0.5512 lb.) corresponding to lts. 0.300 (0.0660 imp. gal. = 0.0792 U.S. gal.) for the 50 cc., and Kgs. 0.300 (0.6614 lb) corresponding to lts. 0.360 (0.0792 imp. gal. = 0.0951 U.S. gal.) for the 100 cc. (to take out the oil, unscrew the lower cock after slightly bending the vehicle toward the right side);
— check that the fixing nuts secure the cylinder and the head to the crankcase;
— check if the exhaust union nut is blocked;
— check the distance between the sparking plug electrodes which should be about 0.5 mm. (0.0197") and clean their points with a small wire brush and some petrol;
— clean the mixture filter in the carburetor;
— adjust the brakes;
— check the tyre pression with a manometer.

Every 2,000 Kms. (1240 miles)

— Carry out the same operations mentioned in the preceding paragraph;

— clean the platinum plated points of the ignition contact breaker with a rag damped in petrol and check the distance between the points which should be 0.3 ÷ 0.4 mm. (0.0118" ÷ 0.0157");

— dampen with 2 drops (not more) of thin mineral oil the lubricating wick of the contact breaker cam;

— check the ignition timing which should be 24° ÷ 26°;

— readjust the clutch (the wear on its linings might otherwise let it slip);

— clean and slightly grease the transmission chain and, if necessary, adjust the tension by means of the chain tensioners on the fork.

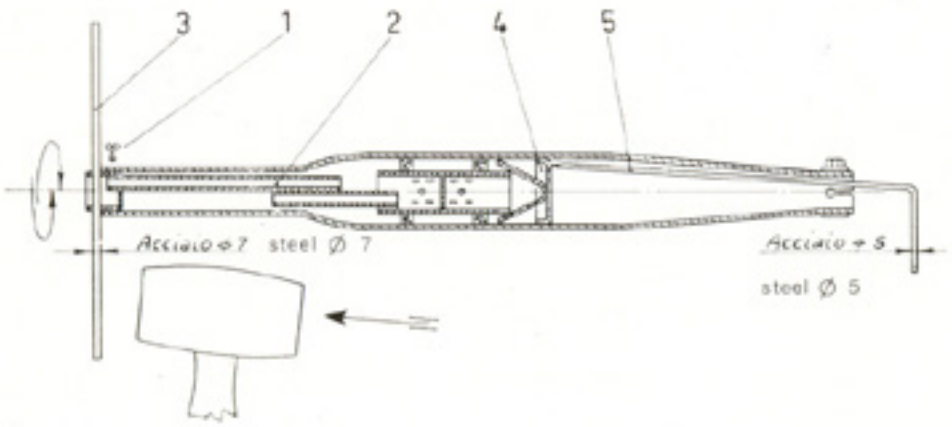
Every 4,000 Kms. (2480 miles)

— Disassemble the silencer, the exhaust pipe, the cylinder head and the cylinder;

— Carefully remove the carbon from the head, the piston, the cylinder port and exhaust duct (this should be done by a DUCATI Service Station); when the piston is assembled again, the arrow carved on its upper side must follow the moving direction, that it to say it must have the same direction of the exhaust duct; when the cylinder head is assembled again, take care to gradually tighten the nuts going many times from one to the diametrically opposite other;

— clean the exhaust silencer as follows.

a) unscrew the screw No. 1;



b) remove the inner tube No. 2 by means of drift No. 3 introduced in the appropriate hole at the end of the same tube. To carry out this operation strike with a mallet and in the same time rotate the tube No. 2 in alternate direction as explained in the figure;

c) remove the carbon from tube 2, by using a flame and a wire brush;

d) scrape off the scale from the holes on the bottom 4, *not with a flame*, but with the pointed pin 5, as shown in the figure;

— remove the carburetor air filter and wash it in petrol or kerosene so that all impurities may be taken out from the gauze;

— clean the carburetor petrol chamber and the main and idling jets;

— check and, in case, adjust the side clearance of the rear fork joint adjusting its spindle (whose threaded end is screwed in the fork hub) and the fixing jam nut;

— lubricate the rear fork joint pin (taking out the rubber top from the frame girder near the terminal block of the electrical system), with oil AGIP F. 1 MOTOR HD SAE 30.

GENERAL CLEANING

The vehicle should be periodically washed and dried according to length of service and state of roads. Clean the engine with kerosene and wipe it dry with clean rags; wash down the painted parts of the frame with water, by using a sponge for washing and a shammy leather for drying. Never use solvents, petrol, alcohol or kerosene, otherwise the paint will turn dull; grease the chromium plated parts with vaseline and polish with a shammy leather.

LOCATING AND REMEDYING FAULTS

The following list contains several faults which may arise and the causes which may have provoked them.

ENGINE DOES NOT START EASILY

First of all, ascertain that there is enough petrol and that the cock is turned on. (A = open, R = reserve). If these are in order, the fault may be one or more of the following causes:

CAUSE	REMEDY
The petrol pipe is clogged.	Blow through it until the obstacle is removed.
The filter for the petrol arriving in the carburetor is dirty.	Remove the filter and clean the gauze by air blast.
The petrol cock filter is dirty.	Remove the filter and clean the gauze by air blast.
The carburetor float is stuck.	Remove the float and clean out the float chamber (this should be done by a Ducati Service Station).
The float is cracked.	Replace it (this should be done by a Ducati Service Station).
The jet is clogged.	Clean it with strong blows of air.
The ignition cable coil and the sparking plug is broken or sparking externally.	Check the cable insulation and, if necessary, replace cable (in a Ducati Service Station).

CAUSE	REMEDY
Defective sparking plug.	Change or clean the plug, making sure that the insulating core is not damaged, that there are no carbon deposits on the electrodes and that the gap between the points of the same electrodes does not exceed 0.5 mm. (0.0197").
The contact breaker points do not open.	Check the position of the fixed contact point (at a Ducati Service Station).
The contact breaker rocker arm is seized on its pivot.	Check the smoothness of the rocker arm and lubricate the pivot (at a Ducati Service Station).
The contact breaker points are dirty.	Clean the points with a rag damped in petrol (at a Ducati Service Station).
The capacitor is broken or is in short circuit.	Replace the capacitor at a Ducati Service Station.
Compression is lacking.	Check whether the sparking plug and the head nuts are tightly screwed in and the piston rings perfect seal (at a Ducati Service Station).

THE ENGINE OUTPUT IS LOW

CAUSE	REMEDY
Irregular feed of petrol to the carburetor.	Clean carburetor filter, cock filter and petrol pipe.
The main jet is partially obstructed.	Clean it out by a blow of air.

CAUSE	REMEDY
The carburetor valve does not open completely.	Readjust the valve opening acting on the adjustment screw of the carburetor Bowden cable (at a Ducati Service Station).
The float needle does not close properly.	Clean the carburetor and especially the needle seat (at a Ducati Service Station).
Petrol is of bad quality.	Empty the tank and refill it at a reliable station.
The sparking plug is not of the right type.	If the sparking plug overheats, you will have preignition, knocking and misses, especially at high revolutions; if the sparking plug remains too cold, you will have no ignition because the electrodes will short-circuit. Use a sparking plug of the appropriate thermic degree; we suggest a sparking plug having a thermal figure of 260 on the Bosch international scale.
The sparking plug works loose in its seat.	Tighten the plug down well. A copper washer should always be placed between the sparking plug and its seat in the cylinder head.
The sparking plug cable sparks externally.	Replace the cable or insulate it better (at a Ducati Service Station).
The sparking plug gap is too wide.	Adjust the gap to its proper width (about 0.5 mm. = 0.0197").
The sparking plug electrodes are dirty.	Clean them.
The contact breaker opening is excessive.	Readjust the opening to a maximum of 0.3 ÷ 0.4 mm. = 0.0118" ÷ 0.0157" (at a Ducati Service Station).

CAUSE	REMEDY
The secondary winding of the coil is short-circuited or broken.	Replace the coil (at a Ducati Service Station).
The silencer is almost completely clogged.	Clean the silencer, to ensure the free discharge of the spent gases.

IF THE ENGINE BEGINS TO WORK IN 4 STROKES

THE CAUSE MAY BE	REMEDY
The filter of the carburetor air intake is overcovered with dust.	Wash the filter with petrol.
The carburetor is not well regulated.	Regulate the carburetor (in a Ducati Service Station).
The float does not keep its right level.	Repair it (in a Ducati Service Station).
The cylinder gas openings are half clogged.	Scrape off the carbon and wash carefully.
The exhaust pipe and the silencer are clogged.	Scrape off the carbon and wash carefully.