

# Foreword

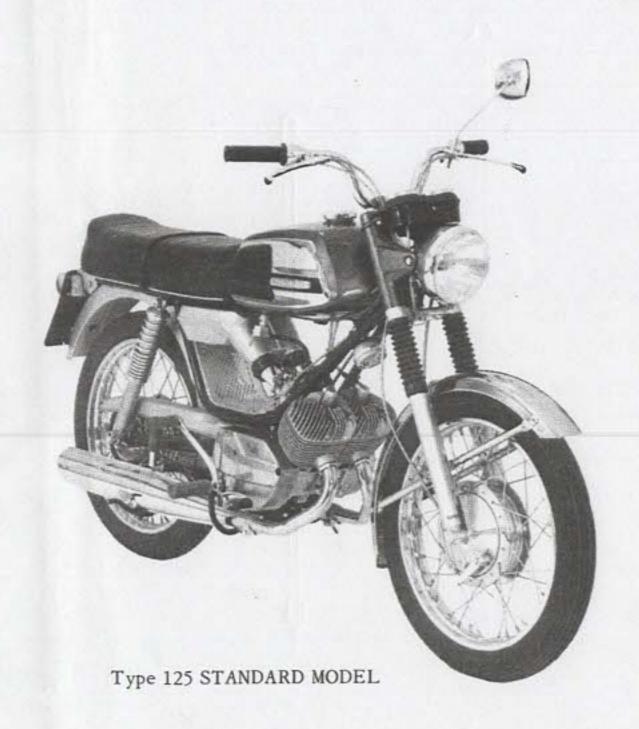
The purpose of this Handbook is to help you maintain your motor-cycle under the best possible conditions and thus to obtain optimum performance. We advise you to read this little guide carefully and to follow closely all the advice and information it contains.

Similarly, still with your own interest in mind, we urge you to insure your motor-cycle suitably and to comply strictly with the provisions of the Highway Code.

The <125 MOTOR-CYCLE is covered by a six-month warranty providing the conditions stipulated at the end of this Handbook are complied with.

The following French patents in particular have been filed regarding the \*125 MOTOR-CYCLE\*:

1.322.733 - 1.336.253 - 1.369.469 - 1.551.875 - 70.21962 and 70.27710.



# The 125 features you will like

#### - Its ELECTRONIC IGNITION

an **exclusive** technical asset which ensures maximum engine efficiency (in particular, the ignition is not sensitive to dampness) and is very easy to start.

#### - Its ACCELERATION, Its PERFORMANCE

achieved by virtue of the qualities of the electronic ignition (accuracy of the ignition points - spark constancy and very high energy) and of the staggering of the 5 gear-box ratios.

#### - Its ROAD-HOLDING

this is due to several features combined: doublecradle frame, harmonious weight distribution, hydraulic front and rear suspensions (CERIANI telescopic forks).

#### - Its EFFECTIVE BRAKING

# Kick-starter Gear-srift pedal Rear brake pedal Twistgrip Indicator switch Horn switch Dip switch Front brake lever Milometer or kilometer Headlight main-switch Lighting switch

# THE 125 MOTOR-CYCLE

The model "125" motor-cycle is equipped with a two-stroke, two-cylinder 125 cc engine, which provides remarkable engine torque regularity and great acceleration.

The five-speed power unit consists of two cylinders inchned roarwards and with identical cooling conditions. The cylinders and cylinder-heads are provided with "panoramic" fins which make for better cooling. The engine is fed by two carburetter with removable-filter intake silencers and the exhaust through two large-volume silencers.

The engine has a three-bearing crankshft, fitted with a multiple-disc oil bath clutch. The ignition is of the «Electronic» type. Each cylinder is provided with a separate ignition unit.

Front and rear hydraulic suspension.

The instrument-panel includes a speedometer and a revcounter. The machine is fitted with a steering lock.

### Identification plates and inscriptions

Apart from the rear registration-plate, the motor-cycle is fitted with the following identification plates and inscriptions:

#### "MANUFACTURER" 'S NAME -PLATE

This plate is located underneath the saadle. It includes in particular the cubic capacity and serial-number of the machine.

#### SERIAL-NUMBER MARKING

The serial number is stamped on the frame itself, underneath the saddle, next to the "manufacturer" name-plate.

#### ENGINE SERIAL-NUMBER PLATE

The engine serial-number plate is fitted on the right hand side of the machine, on the cylinder-head top right hand fin.

The manufacturer's stamp is on the exhaust silencers.

This stamp is on each silencer, about half way along, on
the lug welded onto the silencer and attaching it to the frame.

## BEFORE USE

#### STEERING LOCK

The steering lock is located on the lower right hand part of

the steering head tube.

The «125 de Luxe» is fitted with a battery, direction indicators and a «stop» light, there is also a key-contact on the right hand side of the head-lamp. This key connects the battery to the lighting and indicator equipment.

#### FUEL

We recommend the BP ZOOM self-lubricating blend. If the BP ZOOM is not available, you can use a mixture made with 5 °/° of BP stroke Zoom International oil with standard petrol. If the products BP are not commercialized, use any good quality «2 stroke oil».

#### FUEL TAP (Fig. 3)

This has three positions and is located underneath the fuel tank:

Open:
lever downwards (o)
Reserve:
lever horizontal on the
left hand side (r)
Shut:
lever horizontal on the
right hand side (s)

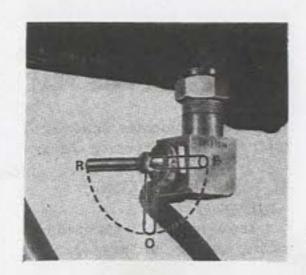


Fig. 3

CASTAD LAT 2 CASTADE 4T 350.

GEAR-BOX (Fig.4)

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Fill the gear-box with BP Super viscostatic SAE 20 W 50 oil until the oil is flush with the filler-plug (0.650 l).



Fig. 4

#### TYRE PRESSURE

|       | Single | Rider | Two | Riders |
|-------|--------|-------|-----|--------|
| Front | 1.2    | kg    | 1.2 | kg     |
| Rear  | 1 6    | kg    | 2   | kg     |

### HANDLEBAR ADJUSTMENT (Fig.5)

The direction of the handlebar can be adjusted. This is done by loosening the four inside hex head retaining screws (spanner in the tool-kit) located on the handlebar attachment clamp. After the adjustment, screw the screws up tightly.

### HEADLAMP ADJUSTMENT (Fig.6)

This is done with the two side attachment screws. The dipped headlamp should be tilted downwards so as to illuminate the road about fifty meters ahead, with the motor-cycle laden.

There is a main-Switch on the instrument panel and a dip switch on the handlebar left hand side.

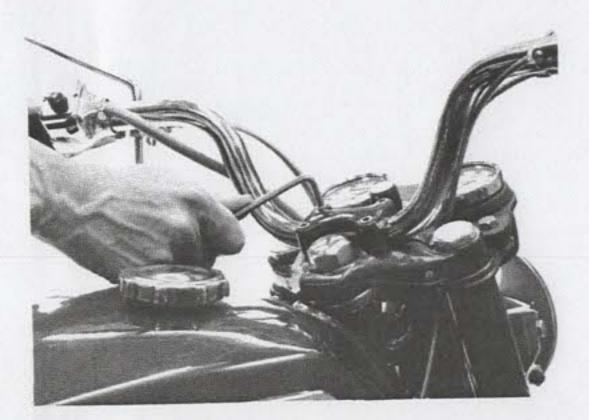
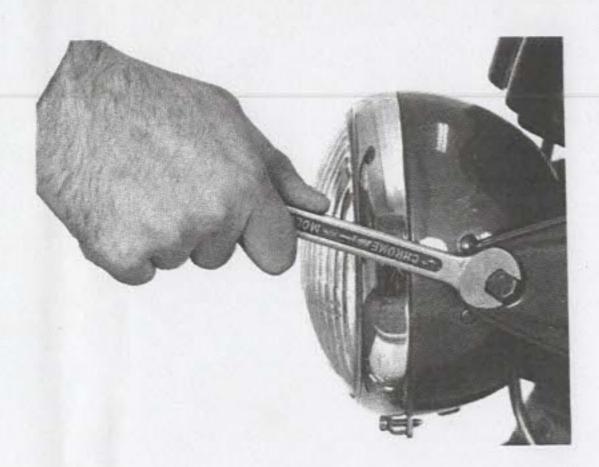


Fig. 5



#### REAR-VIEW MIRROR ADJUSTMENT

Do not forget to adjust the rear-view mirror before starting.

HORN

The horn-switch is on the left-hand side of the handlebar.

DIRECTION INDICATORS (De Luxe Model)

The direction indicator switch is on the right hand side of the handlebar.

TOOL-BOX

Lift up the saddle to get to the tool-box (Fig.7).



Fig. 7

## USE

#### STARTING-UP

Start the «125» with its wheels on the ground, not resting the stand.

1º Open the fuel tap which is located underneath the fuel

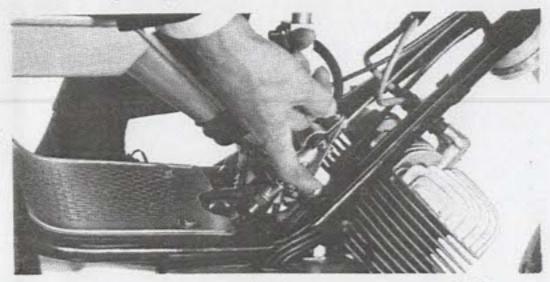
tank (Fig.3).

2º Flood the carburetter slightly by depressing the tickler on the float-chamber. Slightly open the accelerator twistgrip (open it further if the engine is hot). If starting in cold weather, actuate the choke next to the carburetters by pulling the rocking lever to the right (Fig.8). Only use the choke for a few moments.

3º Check that no gear is engaged (neutral is between first

and second gear).

4º Start the engine with the kick-starter. Release the choke if it has been used. Let the engine idle for a few moments to reach the right temperature.



STARTING

Fig. 8

1º To start, declutch fully, engage first gear by depressing the gear-shift pedal downwards, and slowly release the clutch lever while accelerating.

To shift to second, third, fourth and top gear, declutch, slow the engine, lift the gear-shift pedal up, release the clutch lever and accelerate.

Remember that to «change up», you must, when re-accele-

rating, accelerate less than when «changing down».

2º To slow down, you will generally only need to decelerate so as to use the engine to brake. If this is not enough, use the brakes. Never put the brakes on without first decelerating.

3º When going downhill, do not declutch or change into neutral since the motor-cycle engine is the best possible brake.

Never ride with your hand on the clutch lever.

#### STOPPING

To stop the engine, completely close the twistgrip, change into neutral and switch off the ignition (contact button in the right lower side of the headlamp), and close the fuel tap.

On the De Luxe model, also remove the contact key located on the right hand side of the headlamp. The key enables the lighting and signalling equipement to be powered.

#### RUNNING-IN

Our engines are fitted with very hard chromium-plated aluminium cylinders with a minimum play initially. During the first 1500 km or 1000 miles the engine should be carefully run in, this means using the motor-cycle under normal conditions without letting it strain or heat abnormally when going uphill during this period. It will ensure the maximum subsequent performance, and long life. Avoid running the engine for long periods at top speed. In particular, when in top gear do not exceed 100 kph or 55 mph (7.500 rpm), except for short spurts.

You do not need to add any oil during the running-in period

if you use BP ZOOM fuel.

# MAINTENANCE - Lubrication

When reading the rev-counter, note that the registers are intended to ensure the best possible use of the engine in the 6,000-9,000 rpm range, at speeds corresponding to the maximum torque and maximum power. At low speed, the rev-counter indications would not be useful for running the machine. The revcounter graduations start at 3,000 rpm.

#### GEAR-BOX

Fill the gear-box (Fig.4) with BP SUPERVISCOSTATICSAE 20, W 50 oil until the oil is flush with the filler-plug opening (0.650 I).

After 500 km, first oil drain, (By means of the plug-screw located underneath the crankcase). After that, check the oil-level every 2,000 km and drain the oil every 4,000 km.

#### TELESCOPIC FORK

The hydraulic lork should be lubricated with BP Hydraulic LHM oil. A drain-plug is fitted at the base of the fork, facing the rear of the motor-cycle. Tho fill with oil (135 cc of oil in each unit), remove the upper retaining bolts. This operation should be done by one of our dealers. On no account must the two fork elements be drained at the same time.

#### SPEEDOMETER

To be lubricated every 3,000 km with BP ENERGREASE C 3 G grease.

#### CHAIN

The chain must be greased every 2,000 km with BP ENERGOL MOTOR OIL SAE 50 oil, preferably with a brush. Brush the oil into the chain and revolve the wheel so as to lubricate the whole chain.

In any case, we recommend that the chain is never soaked in a grease-proofing bath (trichlorethylene, for instance) which would dry up the rollers.

#### HUBS

The front and rear hubs should be greases with not too much BP ENERGREASE L 2 MULTIPURPOSE grease every 6,000 km. This is best done by one of our dealers.

#### MISCELLANEOUS

From time to time, grease the articulations of the various controls and the cable inlets with BP ENERGOL Domestic Oil, using a small brush.

Periodically grease the brake and clutch cable outlet leads with BP ENERGREASE C 3 G grease.

#### Decoking

The recommended BP ZOOM or mixture blend causes only slight deposits of carbon which are easily removable.

Have the exhaust unit deceked every 6,000 km by one of our dealers, and every 12,000 km have a thorough decoking done, also by one of our dealers. (This should include the piston tops, the cylinder heads and the exhaust ports).

The figures 6,000 and 12,000 km should not be taken as definite limits: the engine should be decoked as soon as the following symptom are noticed:

- Engine lacks power.
- Bad starts.
- Back-firing.
- Dirty plug.
- Overheating.
- Engine runs in jerks, or «four-stroke» fashion.

#### BATTERY (125 DE LUXE MODEL)

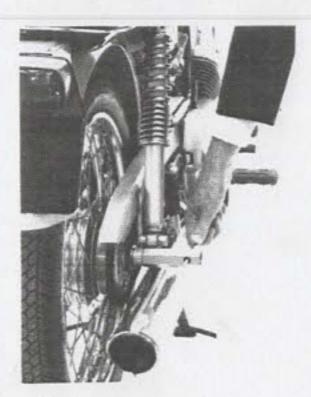
1º If the battery is not giving full power; re-charge it.

Note.- The charge state can, in principle, be observed by me asuring the density of the electrolyte. If the density is lower than 1:21 the battery must be recharged.

2º Frequently check, and in the summer especially, the electrolyte level and replenish it if necessary by adding distilled water up to about 15 mm above the top level of the plates. In particular, do not forget this operation when completing the charging.

3° Keep the battery clean and dry. Cover the terminals with a slight coat of neutral grease that resists acids.

# VARIOUS ADJUSTMENTS



CHAIN

The chain should always be properly greased It should never be too taut. If it is, it will wear out together with the pinions, too soon. Note that the r aximum tension is reached at about half-way along the swinging arm, and therefore that the chain tension should be adjusted with somebody riding on the motor-cycle. To do this adjustment, move the chain adjusters pushing the hub pin reawards.

Fig. 9

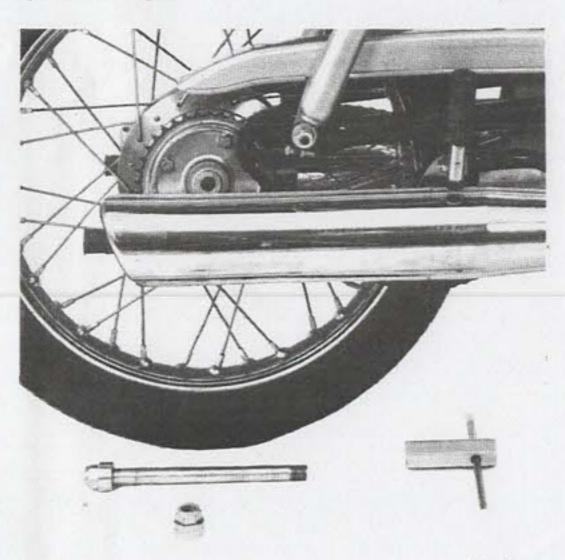
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#### REAR WHEEL (Fig.9)

Loosen the rear hub pin, remove it, and rest the chain on the swinging arm (Fig.10). After unhooking the end of the rear brake control rod (Fig.11), take the wheel out. When reinstalling the wheel, do not forget to engage the fixed point anchoring lug on the point located on the swinging arm.

Avoid damaging or removing the adhesive tape covering the inner side of the rim.

The inner side of the rim is fitted with an adhesive tape. This tape must be replaced with a new one when changing a spoke for example.



F.g. 10

#### TYPE PRESSURE

|       | Single Rider | Two Riders |
|-------|--------------|------------|
| Front | <br>1.2 kg   | 1.2 kg     |
| Rear  | <br>1.6 kg   | 2 kg       |

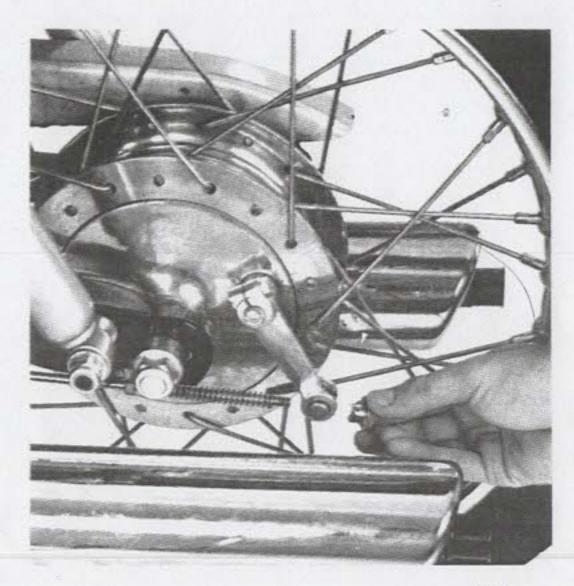


Fig. 11

#### CARBURETTERS

When properly adjusted, the two carburetters will ensure correct running under any conditions. They are each equipped with a silent air intake filter and the two carburetters together are fitted with a jointly controlled choke operated by a rocking lever (Fig.8) which provides satisfactory starting at all temperatures.

Carburetter filter. This can be approached by removing the banjo union in the top of the float-chamber.

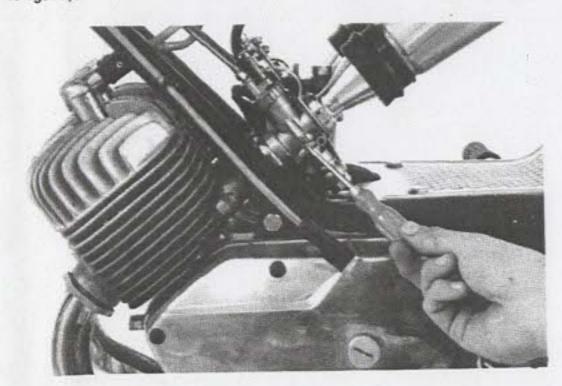
Do not on any account alter the carburetter adjustment. Either during or after the running in period. The main carburetter jet is a 76 gauge. On no account should a jet having a different gauge be fitted. Similarly, do not alter the idling jet.

The acellerator control can be adjusted on the cover of each of the carburetters (8 mm nut, 8 mm lock-nut)(Fig.12).



Fig. 12

At the base of each carburetter, there is an idling thrust screw : idling speed can be increased by tightening this screw (Fig.13).



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Fig. 13

To dismantle the main carburetter jets : remove the two nuts on the base of each carburetter (Fig. 14).

To remove the idling jets : dismantle the unions and the float-chamber to reach the idling jets.



Fig. 14

#### FRONT BRAKE ADJUSTMENT

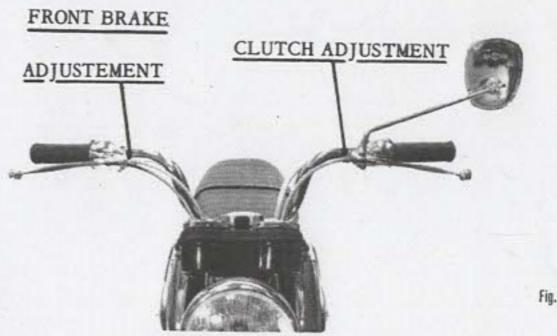


Fig. 15

#### BRAKES

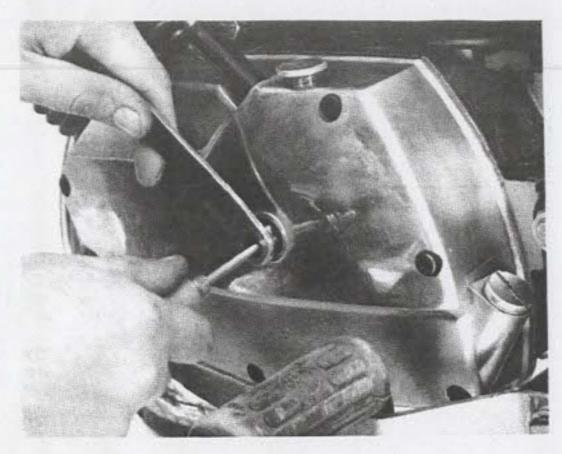
Front brake: this adjusted on the handlebar, using the knurled nut and lock-nut (Fig.15).

Rear brake: screw up the screw on the rear brake rod, leaving about 20 mm of free travel at the end of the pedal. If no travel is left then, when the machine is loaded, ted wheel clearance of the suspension, will give a traction on the rod, which could have an undesired action on the brake.

#### CLUTCH

This is adjusted on the handlebar, using the knurled nut and lock-nut (Fig.15). Leave the cable a free travel of about 2 mm. Another way of adjusting the clutch is by adjusting the plug located on the left hand side housing.

Unscrew the plug located on the left hand engine cover. Then loosen the thrust bearing adjustment pin and his lock-nut, bring to contact the adjustment pin by screwing and go back for a quater of revolution. Then tighten the lock-nut (Fig.16). It is advisable to have this adjustment done by one of our deakers.



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#### Fig. 16

#### CLUTCH CABLE REPLACEMENT

Fully slacken the clutch cable on the handlebar (knurled nut and lock-nut). Then remove the sheath endpiece from its recess and also remove from its recess the cable outlet lead.

On the housing side, remove the protective cap and push it forwards; unscrew the cable guide and unscrew the cable endpiece square unit (Fig.17).

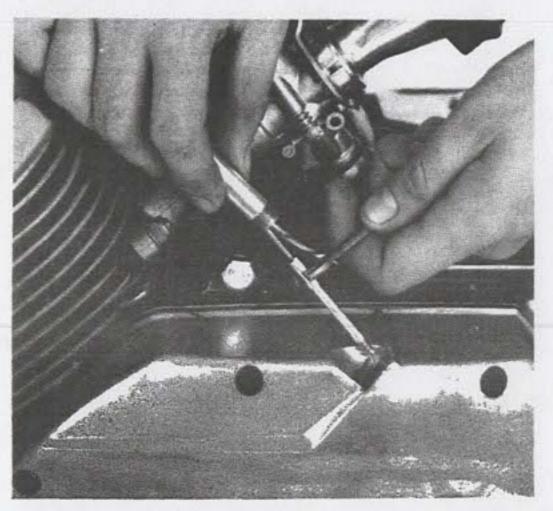


Fig. 17

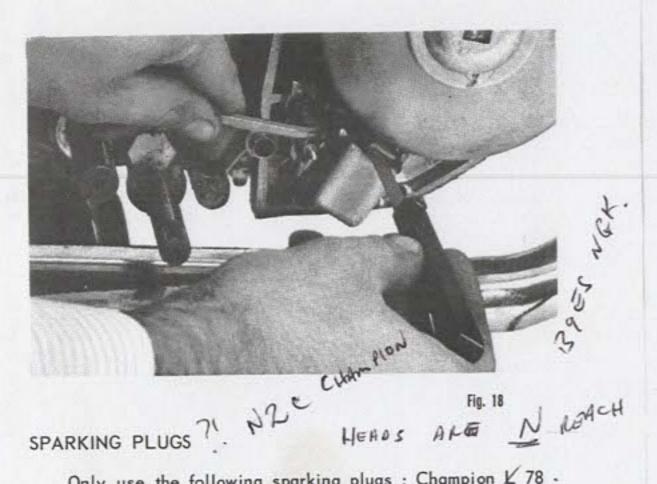
When reinstalling, engage the cable endpiece in the inner clutch control lever yoke, which is located in the housing, using the cable endpiece guiding nipple. Screw up the cable endpiece and the sheath guide. Reintall the protective cap.

When reassembling, do not forget to reset the cable free travel which should be about 2 mm.

This operation should be done by one of our dealers.

#### FLYWHEEL MAGNETO - IGNITION

The «125» motor-cycle electronic ignition comprises one self-operating unit per cylinder. This ignition is of the capacitor discharge type controlled by an electro-magnetic and thyratron pick-up. The pick-up drive pins located on the outer rim of the flywheel enable the advance (1.5 mm) to be particularly accurately adjusted. Radial play between the detector points and pole should be 1/10 to 2/10 mm (Fig.18). Adjust this play by moving the detector, and by adjusting the retaining screws. We advise our dealers, when adjusting the flywheel magneto, after removing the housing and kick-starter, to avoid, in this state, starting the engine in any way at all, since the points located on the outside rim of the rotor could seriously injure an operators hands if near the moving rotor. Before starting the engine, therefore, replace the flywheel magneto housing.



Only use the following sparking plugs: Champion × 78 -

If the ignition misfires, remove the plugs to clean them and to check the electrode gap which should be 4/10 mm.

#### LIGHTING

The following bulbs should be used:

Front: 6 V - 25/25.

Parking light: (6 V - 15 W «festoon» type).

Panel light: 6 V - 2.7 W.

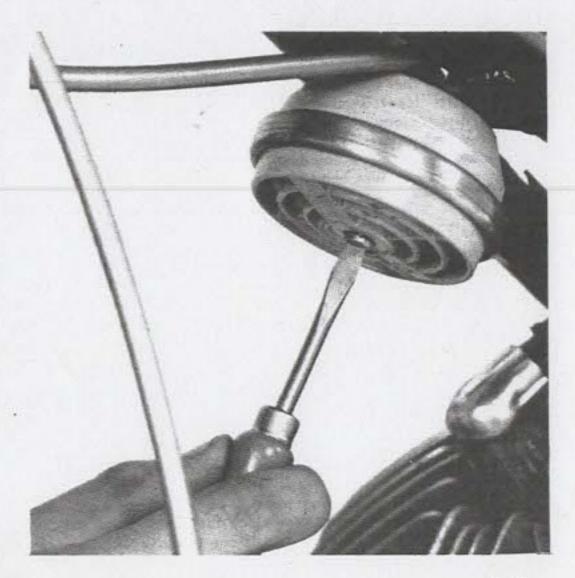
Rear light: 6 V - 4 W «baloon» type. Indicator and stop lights (De Luxe Model).

Indicator light: 6 V/15 W bulb.

Stop light: 6 V 18/4 W two-filament bulb.

#### HORN

This is adjusted on the 125 Standard Model by tightening or loosening the centre screw (Fig.19). The De Luxe Model horn does not need to be adjusted.



# RUNNING INCIDENTS

Serious breakdowns are extremely rare. However, some very slight failures may occur and the following tips should enable you to repair them immediately:

### I - The engine does not start

Two causes: Ignition or fuel inlet.

#### a) IGNITION

Check the sparking plugs for dirt. Clean them with petrol and clean the points with emery paper. After this operation, eliminate all abrasive residues. Never damage the chinaware and do not use a metal-bristle brush. Check the electrode gap which should be 4/10 mm.

- See that the plug leads are not cut.
- Check the coil leads for grounding.

- If the ignition still does not work, this means that the flywheel magneto or the radio suppressors are defective. Consult one of our dealers.

#### b) FUEL INLET

Make sure that fuel is flowing to the carburetter by unscrewing the filter located on the carburetter float-chamber. If the filter is dirty, clean it and, if necessary, the petrol tap filter.

If the carburetter jet is clogged up, use the tyre pump, being

careful not to untroduce any dust.

A jet that has just been cleaned can get clogged up several times in succession, if there is water or foreign matter in the carburetter.

If the carburetter is flooded, this means that some impurity is preventing the float-needle from-resting on its seat. Clean the whole unit and then reinstall it. If the float-needle is worn, replace it.

# II\_ The engine is pulling badly

#### a) IGNITION

- Check the sparking plugs.

- Have the flywheel magneto checked by one of our dealers.

#### b) CARBURETTER

 The carburetter is not getting enough fuel (partly clogged up filter). This may cause a loss of power at high speed. Clean the filters.

- If the engine is running jerkily, or in four-stroke mode, this means that there is either too much fuel, or that the exhaust unit is excessively coked up. Consult one of our agents.

#### e) INSUFFICIENT ENGINE EFFICIENCY

It should be noted that too taut a chain, insufficiently inflated tyres, a clutch control with no free travel, substantially lower the performance of the machine.

# CHARACTERISTICS

### I\_ Engine

Two-cylinder, two-stroke power unit, facing the road, inclined 40° forwards.

Hard chromium-plated aluminium cylinders.

Panoramic-finned cylinders and cylinder-heads.

Bore 43 mm - stroke 43 mm - cubic capacity: 124.889 cc.

Compression ratio: 102 /

3-bearing crankshaft.

Two carburetters, with 19 mm passage, and central floatchamber. Gurtner 2 SP 19 type.

Distributor-type acceleration control.

Choke operated by combined rocking lever.

Inlet silencer attached to the frame, with removable cartridge

Two exhaust silencers.

Three-discs-in-oil type clutch.

5 ratio bear-box. Gears controlled by right-foot selector pedal. 1st gear obtained by fully depressing the selector pedal. Pedal upwards: neutral, 2nd, 3rd, 4 th and top gears.

- REDUCTION RATIOS

#### Speed in kph for Primary Gear-Box Secondary Total 1 000 rpm 24.89 4.22 40/10 lst 35/15 7.23 2nd 14.52 10.34 10.15 3rd 31/19 72/27 35/15 12.22 8.59 4th 29/21 28/22 7.92 13.25 Top

Individual ignition per cylinder. Each ignition is of the «Electronic» type with capacitor discharge controlled by electromagnetic pick-up and thypatron:

Ignition advance: 1.5 mm.

Sparking plug electrode spacing: 4/10 mm.

Oil housing: 0.650 I.Oil: BP Super Viscostatic SAE WP W 50.

### II - Cycle unit

Double-cradle, high rigidity tubular frame.

13-litre fuel tank with reserve tap.

Hydraulic, telescopic fork front suspension.

Rear suspension by swinging arms with hydraulic shockabsorbers.

2.75 x 17 cm «MOTOCYCLETTE» tyres.

Front tyre lined.

Quick-removal rear wheel.

Front and rear brake hubs.

#### TYPE G

#### Diameter of front hub 158 mm Lining area 72 sq.cm

Diameter of rear hub 136 mm Lining aerea 67 sq.cm

#### TYPE M

Diameter of front hub 160 mm Lining area 64 sq.cm Diameter of rear hub 160 mm Lining area 64 sp.cm

Chain protection housing.

Handlebar with levers provided with protection balls.

Two-seater, large-size (60 x 24 cm) saddle and passenger's foot-rests attached to the suspended portion of the machine. The saddle is fitted as a cover to the large-size tool-box (27 cm).

#### GENERAL DIMENSIONS

Length: 1.80 m. Width: 0.70 m.

Height : 1.02 m.

Wheelbase: 1.19 m.

Ground clearance : 0.10 m. Unladen weight : 91 kg.

#### MISCELLANEOUS DATA

Main switch with high and low beam position on the panel unit and two-way switch on the left hand side of the handlebar. Switch-off button grounded, on headlamp.

Illuminated instrument-panel with speedomeler (with pinion on front hub) and mechanically driven rev-counter.

Electric horn. Streering lock.

On the «125 De Luxe», the lighting and signalling equipment (headlamp, red light, direction indicators and «stop» light) are powered by a battery. This is switched on with a key-contact on the right hand side of the headlamp.

#### EXTERNAL ASPECT

Red and black enamel paint. Chromium-plated fuel-tank sides and front mudguard.

# Avoid being NOISY...

Cut-out silencers are forbidden and you may neither eliminate nor modify your engine's silencers.

# Avoid making the engine S M O K E ...

Using a blend containing more oil than indicated by the Handbook's indications is perfectly useless and even harmful. You will dirty your sparking plugs, your exhaust will coke up and your engine will emit fumes that will inconvenience the other drivers.

# Avoid causing radio-electrical INTERFERENCE...

Your 125 motor-cycle is fitted with interference suppressore designed not to harm the proper operation of the engine. You are not allowed to remove the mor to modify them.

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