



COLO

USE and MAINTENANCE

Welcome to the fraternity of « **Gilera** » riders!

We would like to express our appreciation for the choice you have made and to thank you for the preference you have given us.

Your Gilera moped is one of our most recent developments with which we have incorporated the most advanced technical innovations which are the product of our considerable experience.

This means that you own a brand new, carefully tested, elegant machine, full of power, which will give you much enjoyment. We recommend you carefully follow the instructions contained in this book, in order to maintain its efficiency. This way you will come to know your Gilera moped and will enable you to appreciate its technical features by using it in the correct manner.



USE and MAINTENANCE

NOTE:

To maintain your Gilera moped in a perfect and efficient condition and to benefit fully from the guarantee, we recommend that you always refer your repairs to an authorised Gilera dealer.

The parts which « Gilera » provide as spares, are made and tested from the same materials as the parts which make up your Gilera moped. This guarantees longer life, maximum efficiency and a safer machine.

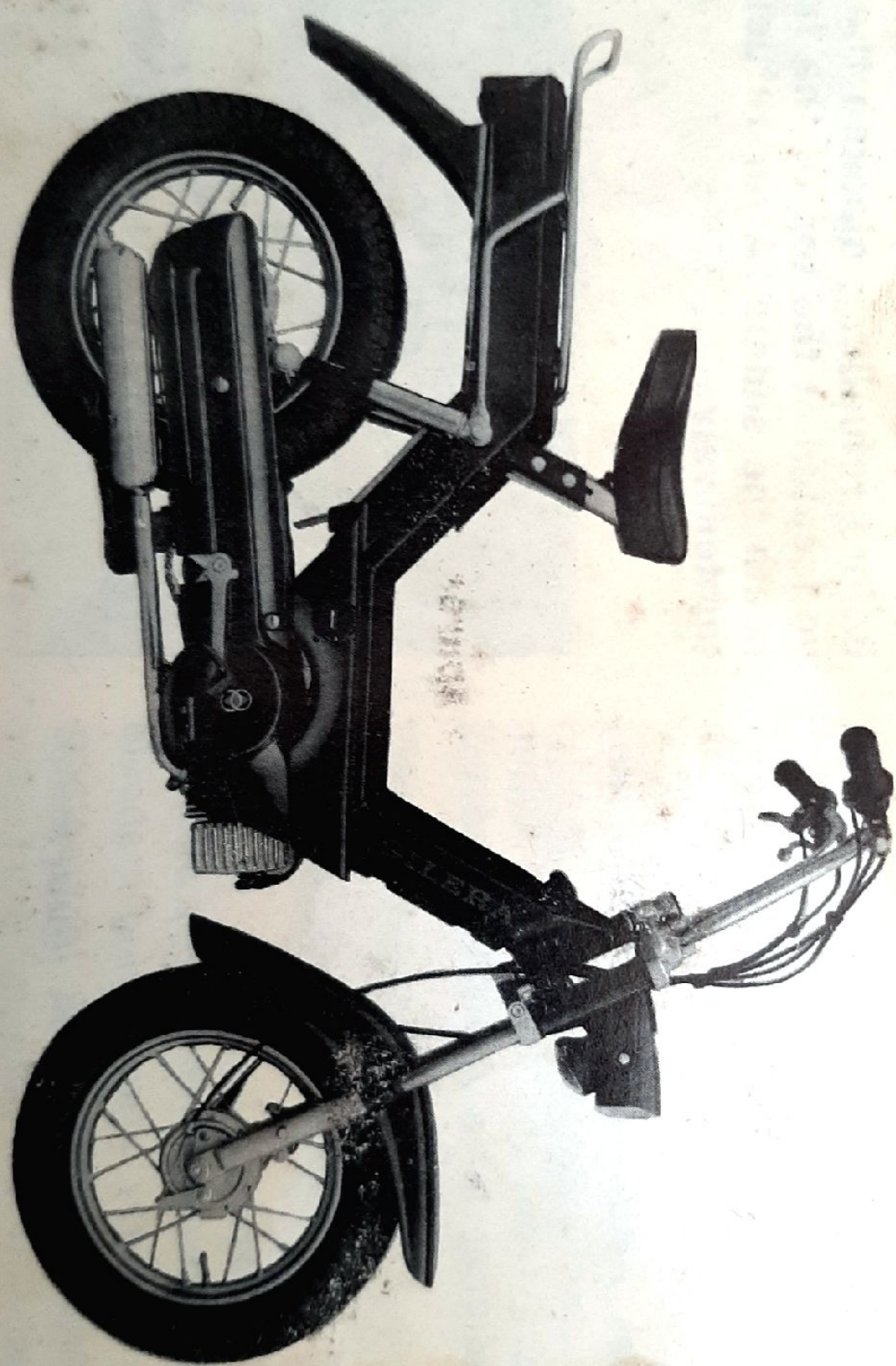
We therefore recommend that you **always demand original « Gilera » spare parts.**

GILERA



MANUFACTURERS
OF VESPA SCOOTERS
SERVICE

Fig. 1 - «eco» moped



ANTI-THEFT STEERING LOCK

To lock handlebar, turn it fully in either direction, rotate the key half a turn anti-clockwise and remove.

To unlock handlebar, rotate the key half a turn clockwise. The key can be withdrawn from the lock also when the handlebar is in the unlocked position.

IMPORTANT:

Record the key number of your machine as it the only way of identifying it should the occasion arise to ask for replacement keys.

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NOTE

Before refuelling, slacken the air valve located at the top of the frame beneath the saddle. After refuelling, retighten valve.

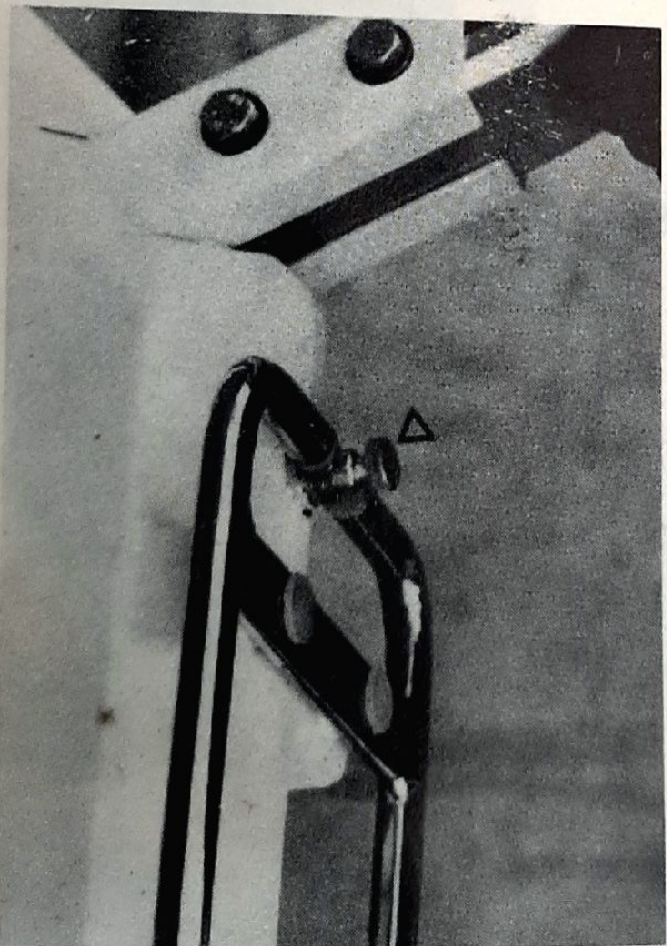


Fig. 2

performance and general characteristics

Operation with 2% (50 : 1) pure SAE oil mixture.

Fuel consumption: (CUNA standards) 1.4 litres per 100 Km.

Max. speed: conforms to current legislation.

Fuel tank range: 250 Km. approx

Petrol tank capacity: 4.5 litres (including 1/2 litre reserve).

Wheelbase: 1.04 m.

Max. width: 0.670 m.

Max. height: 1.01 m.

Max. length: 1.55 m.

Dry weight: 44 Kg.

Carrying capacity: 1 person.

Engine: two stroke, rotary valve induction.

Number of cylinders: one.

Cylinder bore: 38.4 mm.

Piston stroke: 43 mm.

Piston displacement: 49.77 cu.cm.

Compression ratio: 9 : 1.

Ignition: alternating current, flywheel magneto ignition with external H.T. coil.

Spark plug: Marelli CW 4 N-AT, Bosch W95 T1, Champion L90 or AC45F.

Ignition advance: 19° B.T.D.C.

The moped is provided with rear suspension (hydraulic shock absorbers) which controls the movement of the engine wheel unit which pivots at the front of the frame. The drive from engine to wheel is by means of a vee belt, automatic clutch and reduction gear.

Engine/wheel ratio: 10.72 : 1

The vehicle is also provided with auxiliary drive to the rear wheel by means of pedals, roller chain and "free wheel" sprocket.

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VEHICLE:

Frame: cold drawn and welded pentagonal steel tube incorporating fuel tank.

Front suspension: telescopic fork.

Brakes: internal expanding type on both wheels.

Wheels: tangent spoke wheels with steel rims: 3.00 x 12".

Tyres: front 3.00 x 12" ribbed, rear: 3.00 x 12" ribbed.

Tool kit: one box spanner 17/21 mm., one open end spanner 10-11-13 mm., one open end spanner 7/10 mm. Screwdriver and one Tommy bar for box spanners.

The tool kit is contained in a bag located together with this book, in the housing provided in the rear fairing.

ELECTRICAL SYSTEM (see fig. 3)

It is comprised of the following equipment:

- four pole 6V - 18W flywheel magnet
- headlamp with two 6V 15W bulbs for main and town light
- tail lamp with reflector and 6V 3W rear light bulb
- 6V a.c. electric horn
- light switch fitted on headlamp.

Note: For the U.K. market headlamp bulb is 18W.

IDENTIFICATION DATA

Each vehicle is marked by identification numbers stamped on both frame and engine.

Engine number stamped on right side of crankcase.

Frame number stamped on rear offside of headstock.

THESE NUMBERS MUST ALWAYS BE QUOTED WHEN ORDERING SPARE PARTS.

The frame number is required for legal identification of the vehicle and it is recorded on the vehicle registration documents.

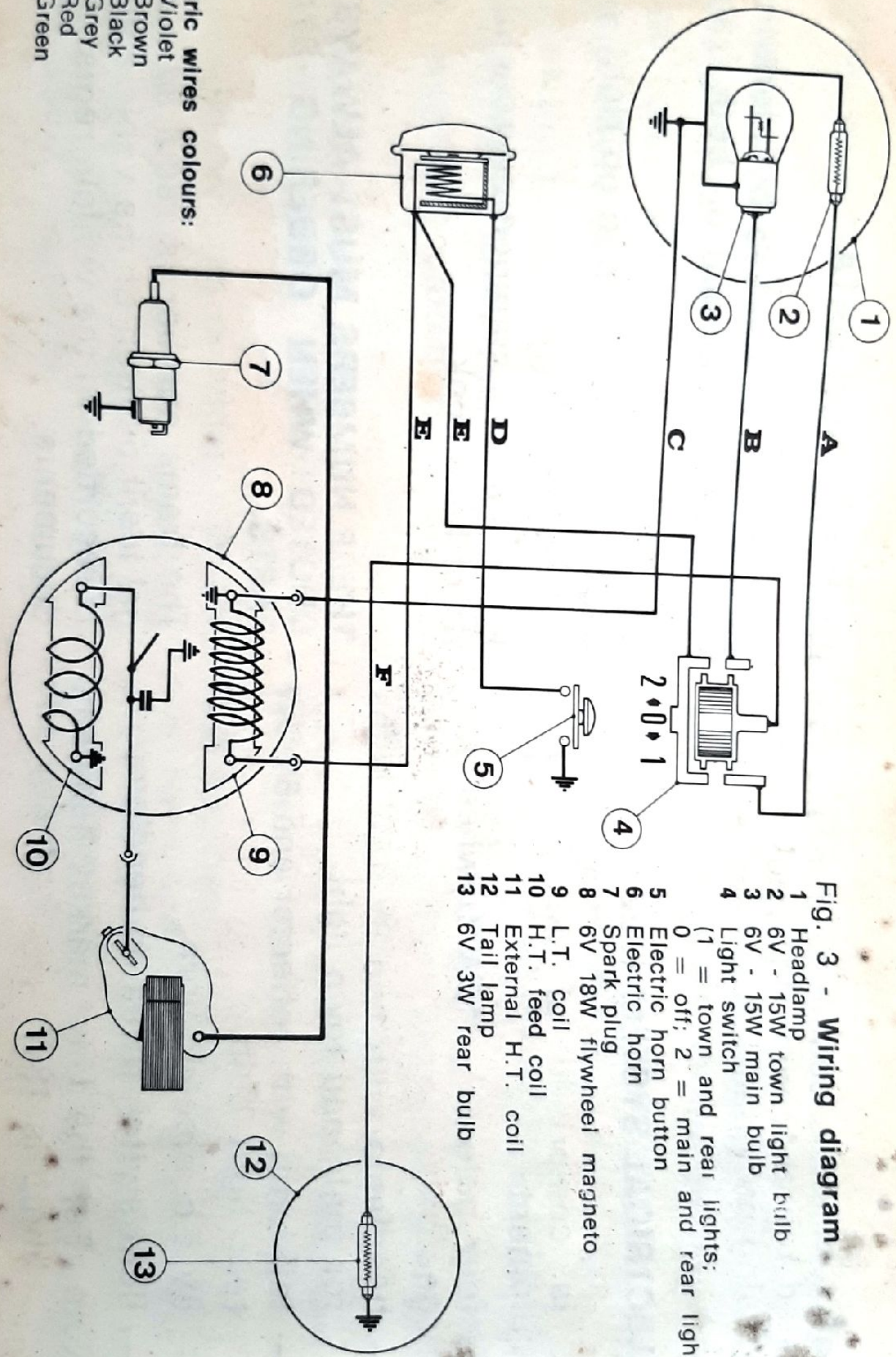


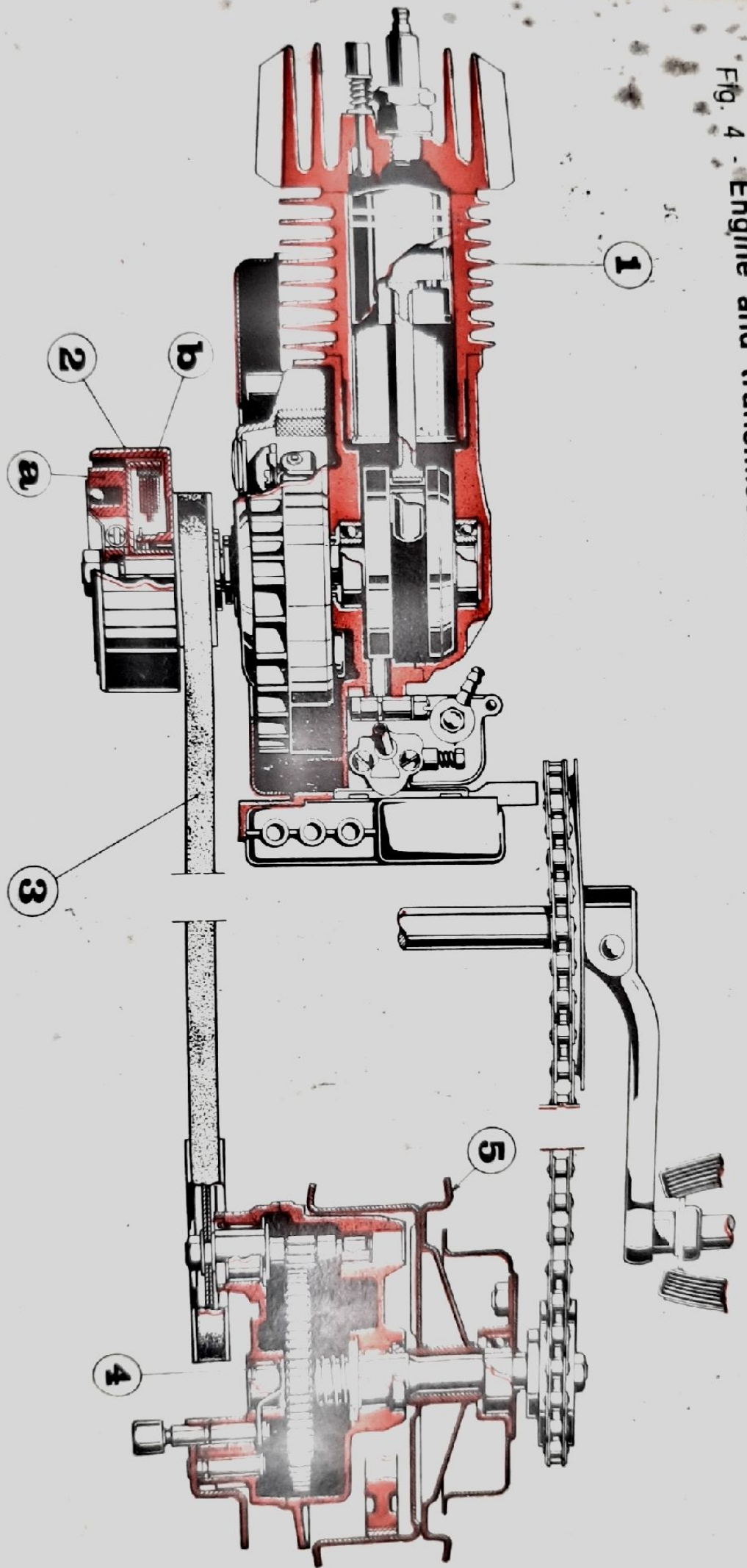
Fig. 3 - Wiring diagram

- 1 Headlamp
- 2 6V - 15W town light bulb
- 3 6V - 15W main bulb
- 4 Light switch
(1 = town and rear lights;
0 = off; 2 = main and rear light)
- 5 Electric horn button
- 6 Electric horn
- 7 Spark plug
- 8 6V 18W flywheel magneto
- 9 L.T. coil
- 10 H.T. feed coil
- 11 External H.T. coil
- 12 Tail lamp
- 13 6V 3W rear bulb

Electric wires colours:

- A - Violet
- B - Brown
- C - Black
- D - Grey
- E - Red
- F - Green

Fig. 4 - Engine and transmission scheme

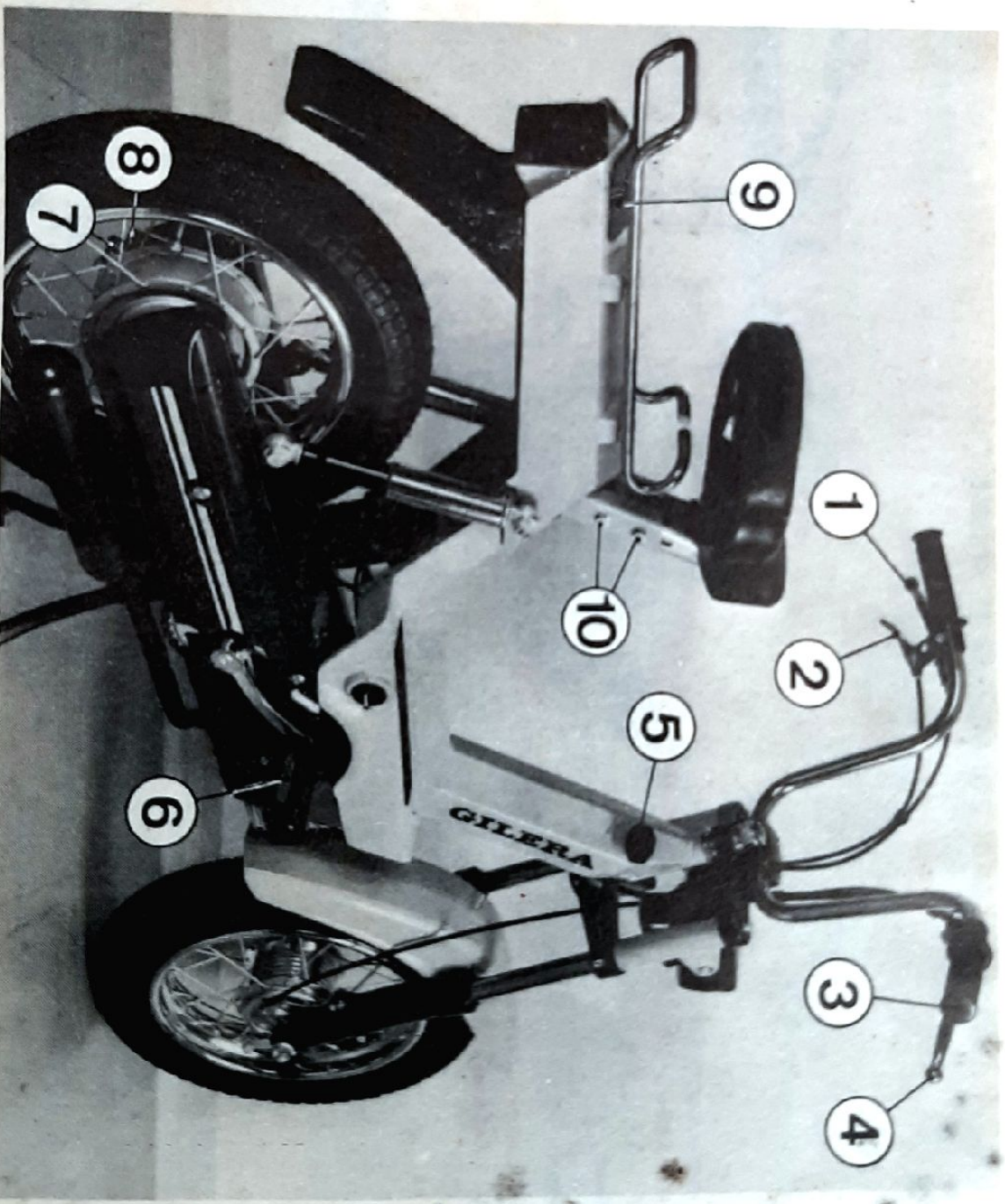


- 1. Engine -
- 2. Automatic clutch: a) Centrifugal shoes for starting - b) Centrifugal shoes for drive from the engine;
- 3. Vee belt -
- 4. Rear hub -
- 5. Rear wheel (driving).

Fig. 5

Position of controls:

1. Rear brake lever
2. Decompression valve control
3. Throttle control
4. Front brake lever
5. Tank filler cap
6. Pedal
- 7-8. Control for rearwheel drive
9. Tool kit housing
10. Saddle clamping bolt



driving instructions

MIXTURE REFUELLING

During and after running-in use mixture of petrol/oil 2% (50 : 1) oil (pure mineral oil SAE 30 grade 20 cc for 1 litre (2 star petrol)).

N.B. - To ensure constant fuel supply, periodically clean the breather in the tank cap (accessible from beneath the tank cap).

RUNNING IN

During the first 500 Km (300 miles) do not keep the throttle fully open for long periods. Between the first 500/1.000 Km (300/600 miles) check nuts and bolts for security (particularly

those retaining the engine to the frame).

TYRE PRESSURES

Front wheel: 1.6 Kg/cm² (23 p.s.i.)

Rear wheel: 1.8 Kg/cm² (26 p.s.i.)

OIL LEVEL IN REAR HUB:

Before using the vehicle, check there is oil in the rear hub (content 60 g). When the machine is upright the oil level must be level with the lower edge of the refuelling hole (see fig. 19 A).

Oil used: Esso gear oil 90.

STARTING ENGINE

Carry out the operations of fig. 6.

Fuel tap position

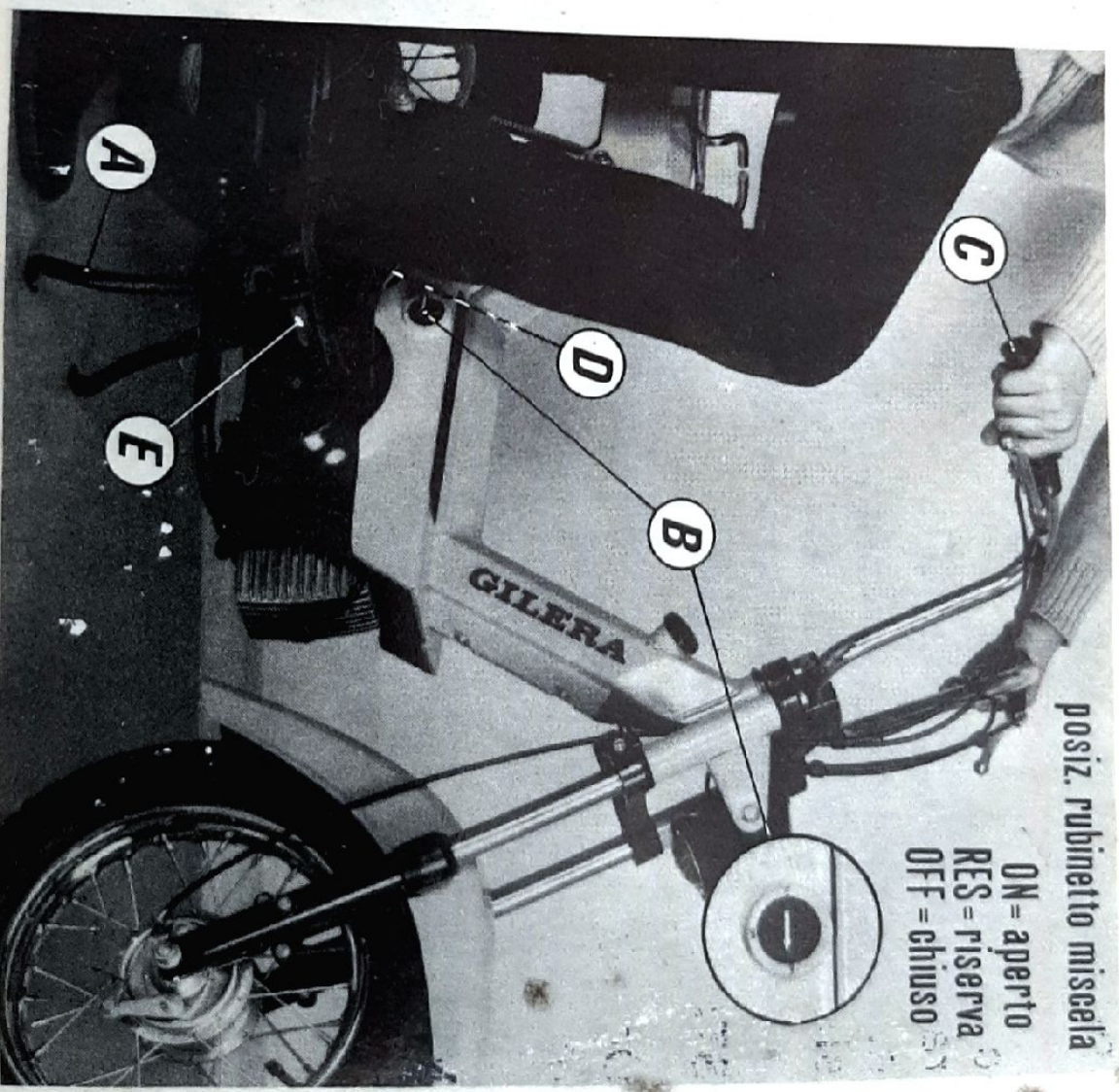
- ON - open
- RES - reserve
- OFF - close

Fig. 6

Starting procedure

- A) Place the machine on its centre stand, check that rear wheel is free from the ground - B) Open the fuel tap (rotate the lever to the intermediate position as in fig. 6) - C) Close the throttle control - D) With cold engine depress the choke lever - E) Operate the pedal.

N.B. - It is advisable to use the decompression lever (Fig. 5 n. 2) also to start on the centre stand. When the engine starts, fully opening throttle control the choke lever « D » returns automatically to the running position.



The vehicle can also be started by the driver sitting on the saddle. (The centre stand not on the ground) operating the decompression lever (fig. 5 n. 2) pedal for a few yards, then releasing the valve and open the throttle.

STARTING AND RIDING

Operate the throttle which controls the speed of the vehicle.

Note: - When starting with the vehicle on its centre stand. Under no circumstances must the rear wheel be allowed to come into contact with the ground when revolving, at speed, as the sudden braking effect could impose an excessive load on to the re-

duction gear and cause damage.

STOP WITH ENGINE RUNNING

If the throttle control is closed the vehicle will remain stationary with the engine running.

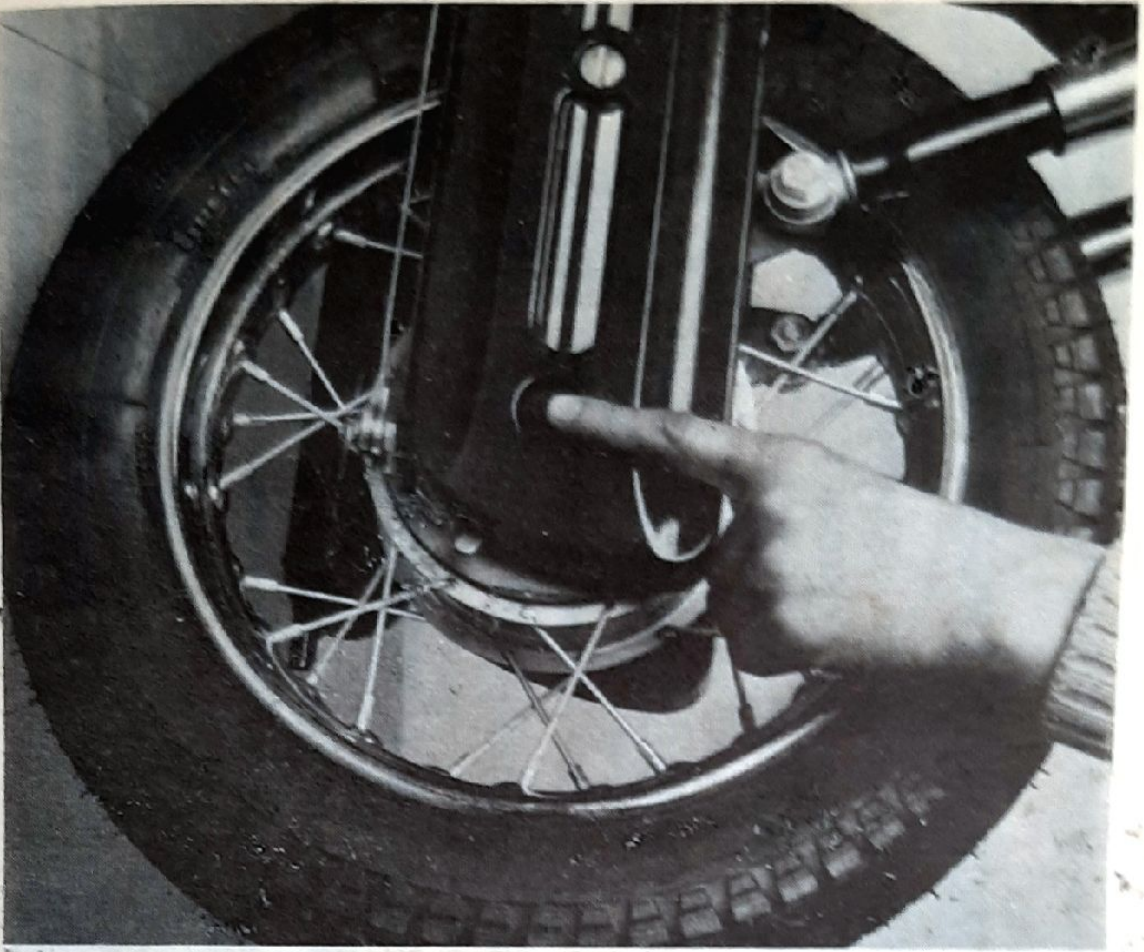
STOPPING ENGINE

Close the throttle control and operate the decompression lever (fig. 6 n. 2).

USE AS A BICYCLE

Push in the button of fig. 7 to disconnect the rear wheel from the drive.

To reconnect the rear wheel to the drive operate the lever of fig. 8, which automatically returns the button to the normal position. These operations



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Fig. 7

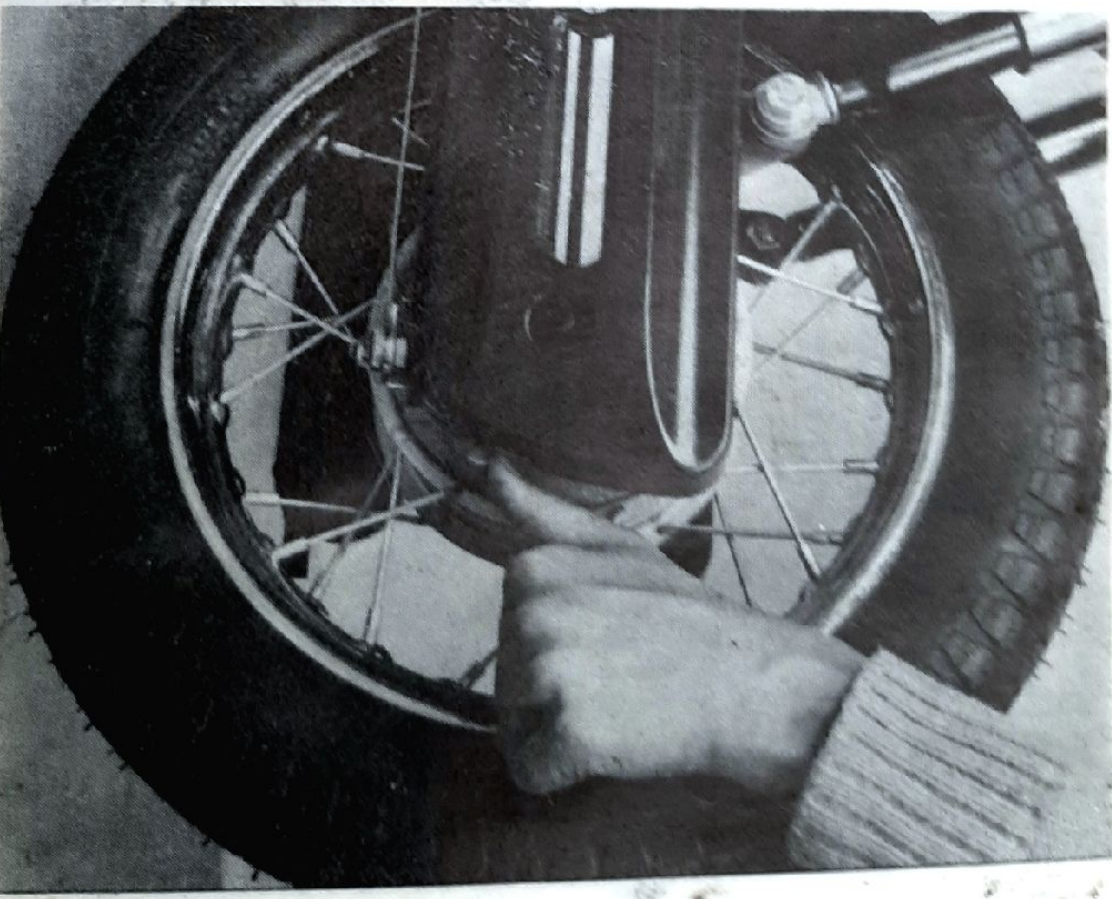


Fig. 8

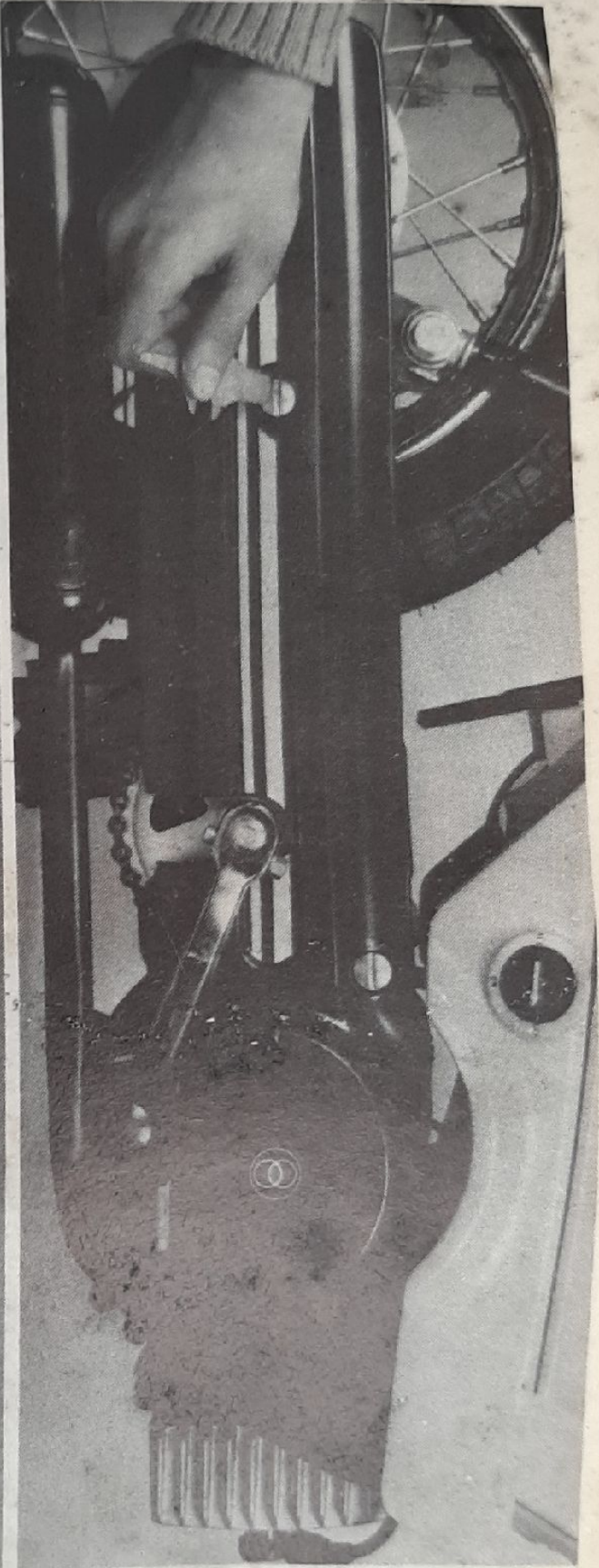


Fig. 9



Fig. 10

must be carried out without the engine running.

SPARK PLUG REMOVAL

Operate as indicated in fig. 11 « A ». The electrodes can be cleaned with a wire brush or by emery cloth, the gap must not exceed 0.5 mm.

AIR CLEANER DISMANTLING

Remove the chain cover and the right foot plate, release the two fasteners by means of a screw driver. Loosen the air cleaner fixing screw. Then remove the air cleaner.

CARBURETTOR DISMANTLING

If the carburettor is to be dismantled

(for cleaning for example) remove the air cleaner, unscrew the carburettor cover and remove, slacken the carburettor fixing clamp screw. The carburettor can be withdrawn by slight alternate rotations. The carburettor compartment must be cleaned with petrol (do not use wires or the like) to clean calibrated holes. If possible dry with compressed air.

N.B. - During reassembly ensure that the throttle control outer cable is located in the terminal « B » otherwise it will result in faulty carburettor control.

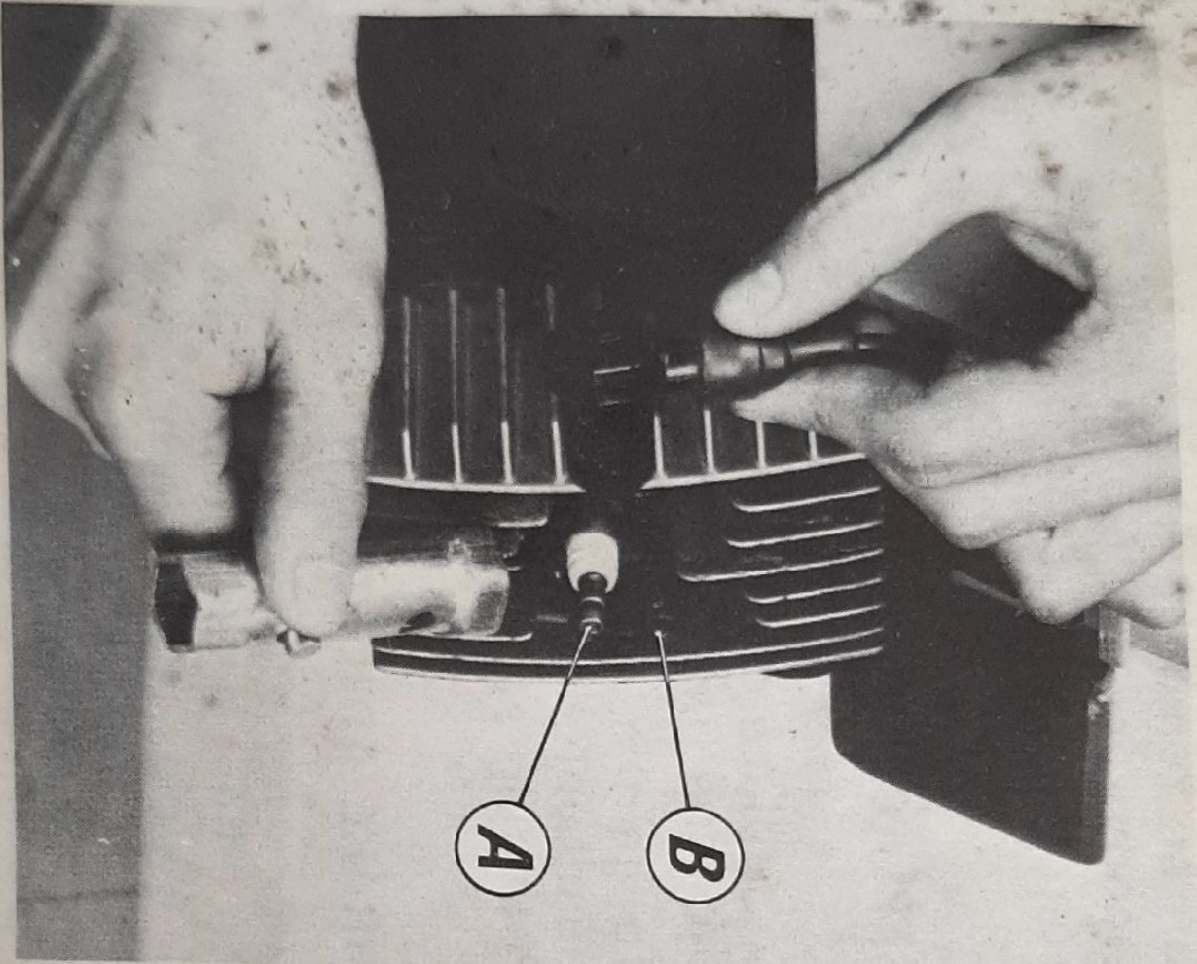


Fig. 11

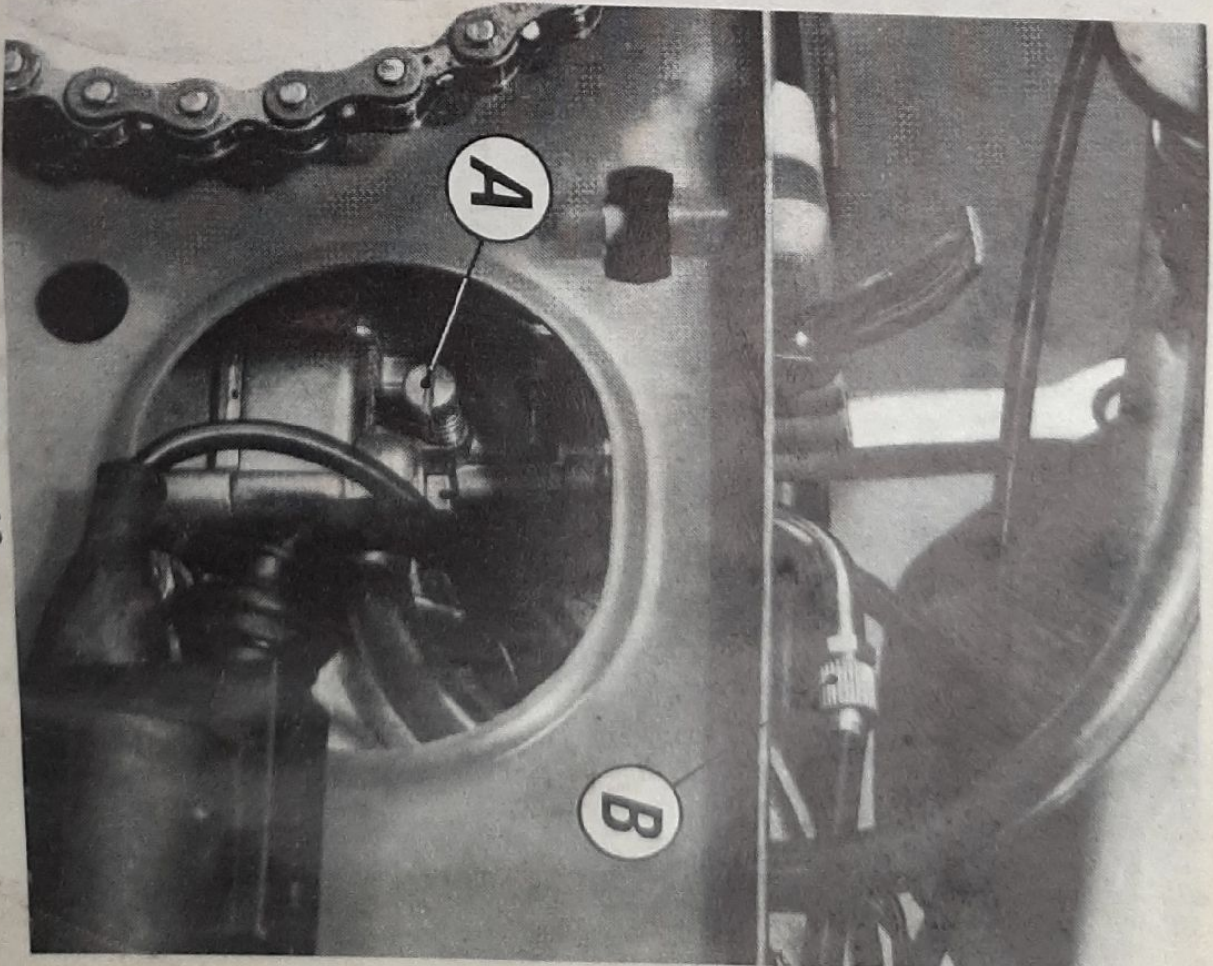


Fig. 12

CARBURETTOR ADJUSTMENT

To adjust throttle cable « end play » rotate the adjuster as necessary « B » fig. 12. **To adjust slow running, rotate screw « A »** fig. 12.

The slow running adjustment must be carried out when the rear wheel is free from the ground (vehicle on its centre stand) in order to obtain regular slow running without the rear wheel being turned by the engine.

CYLINDER HEAD REMOVAL

To remove the cylinder head it is necessary to use a box spanner 11 mm. with which the three retaining nuts

can be removed, then disconnect the decompression lever control cable from the spring arm (fig. 11 « B »).

REPLACEMENTS OF BULBS

To replace the tail lamp bulb remove the lens fixing screws and dismantle.

To gain access to the bulbs in the headlamp, loosen the headlamp ring retaining screws.

BRAKE ADJUSTMENT

To adjust brakes, rotate the adjusters « A » fig. 13 on the handlebar levers. When the brake levers are released, the wheels must turn freely.

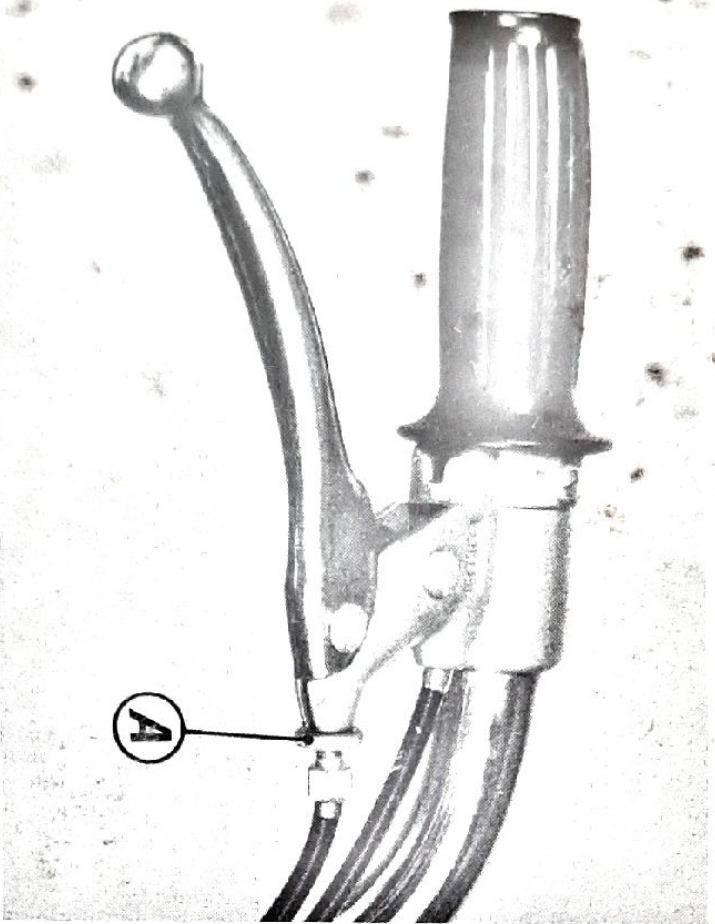


Fig. 13

CHAIN ADJUSTMENT

To adjust the chain tension, slacken the nut of chain tensioner (fig. 15 « 1 ») and adjust as necessary, then retighten the nut.

ADJUSTMENT OF SADDLE, HANDLEBAR AND HEADLAMP

To adjust saddle height, slacken the bolt clamping it to the frame (fig. 14).

After adjustment, **retighten the bolt.**

To adjust the handlebar, slacken the bracket clamping nuts, retaining the handlebar on the fork in order to obtain the most suitable driving position.

The adjustment of the headlamp is carried out by loosening the side screw retaining it to the support.



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Fig. 14

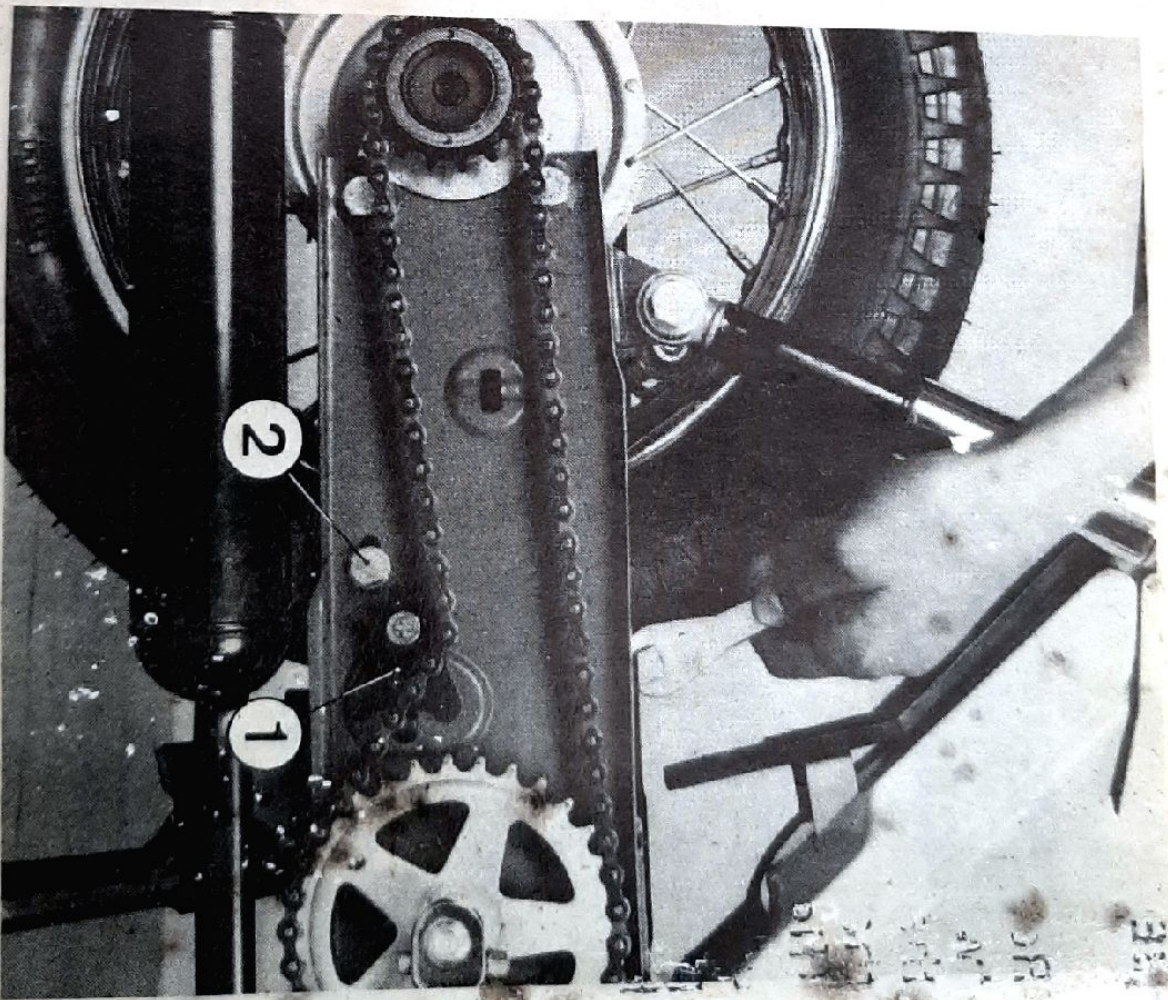


Fig. 15

BELT ADJUSTMENT

Remove the covers by rotating the two spring screw fasteners. To adjust the belt slacken the bolts retaining the engine and silencer to the frame (fig. 21 « 1-» » and fig. 15 « 2 » and operate the lever n. 1 of fig. 16, which permits the belt to be tightened: the belt tension should be sufficient to avoid slipping, but not overtight. Then retighten the bolts retaining the engine and the silencer.

BELT CHECK

To check there is no slipping of the belt when driving, proceed as follows:

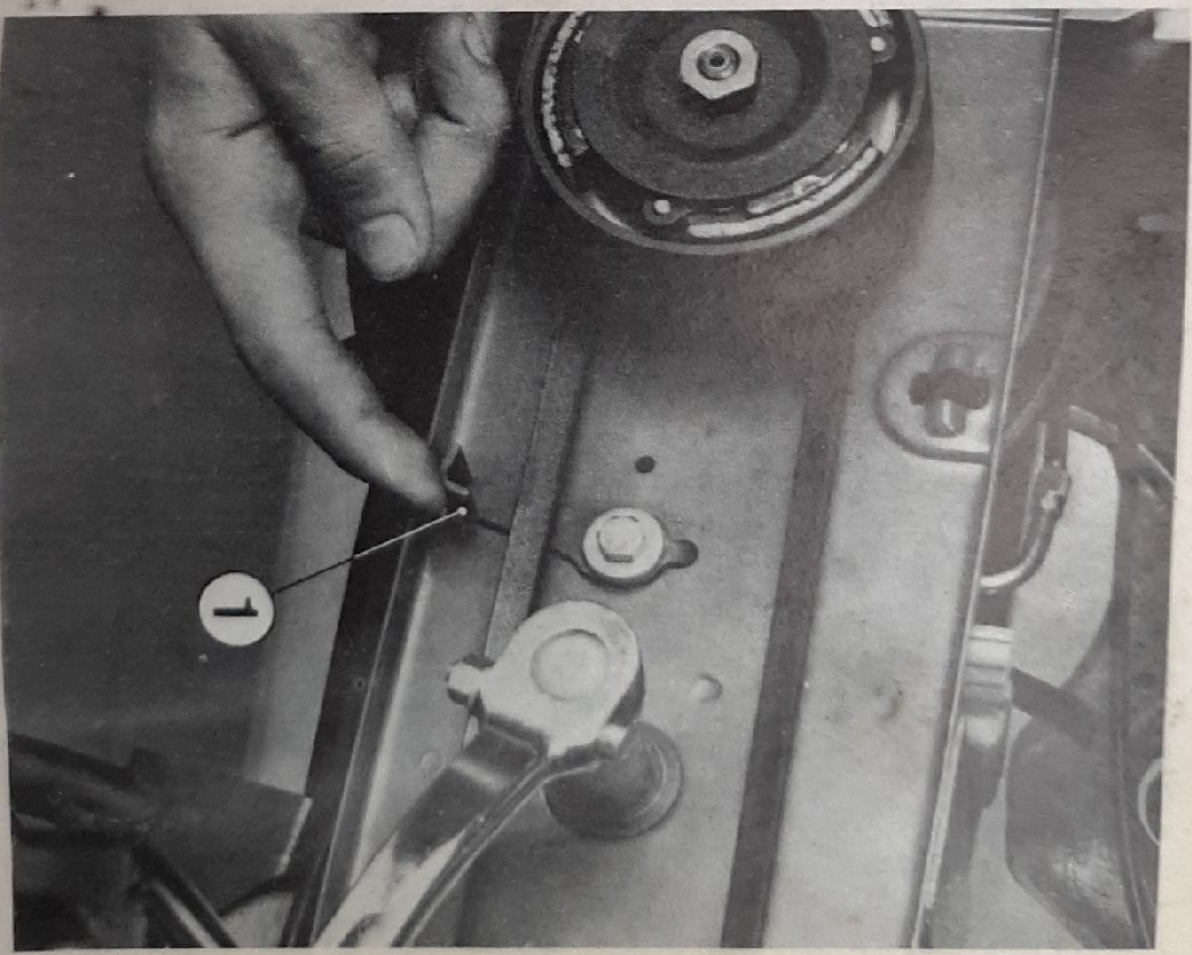


Fig. 16

— Place the vehicle on its centre stand with rear wheel free from the ground, fully open the throttle control.

— Apply the rear brake and stop the wheel; the belt must remain stationary even though the engine continues to run. If the belt slips adjust the tension or if damaged, replace it with a new belt. Be sure to use a genuine Gilera spare.

REAR WHEEL INNER TUBE REMOVAL

Remove rear inner tube from tyre, remove the chain cover (fig. 9) and loosen the pulley retaining nut « A » fig. 17, in order to allow the detachment of the chain from the free wheel sprocket. Remove the two mounting

bolts « B » and rotate the flange « C » from the position in fig. 17 to the one in fig. 18. The inner tube can be removed through the space made by the flange rotation « C » between the chain sprocket and the frame (see fig. 18). To reassemble follow the reverse procedure.

N.B. - The replacement or repair of the inner tube is carried out as in normal bicycle practice.

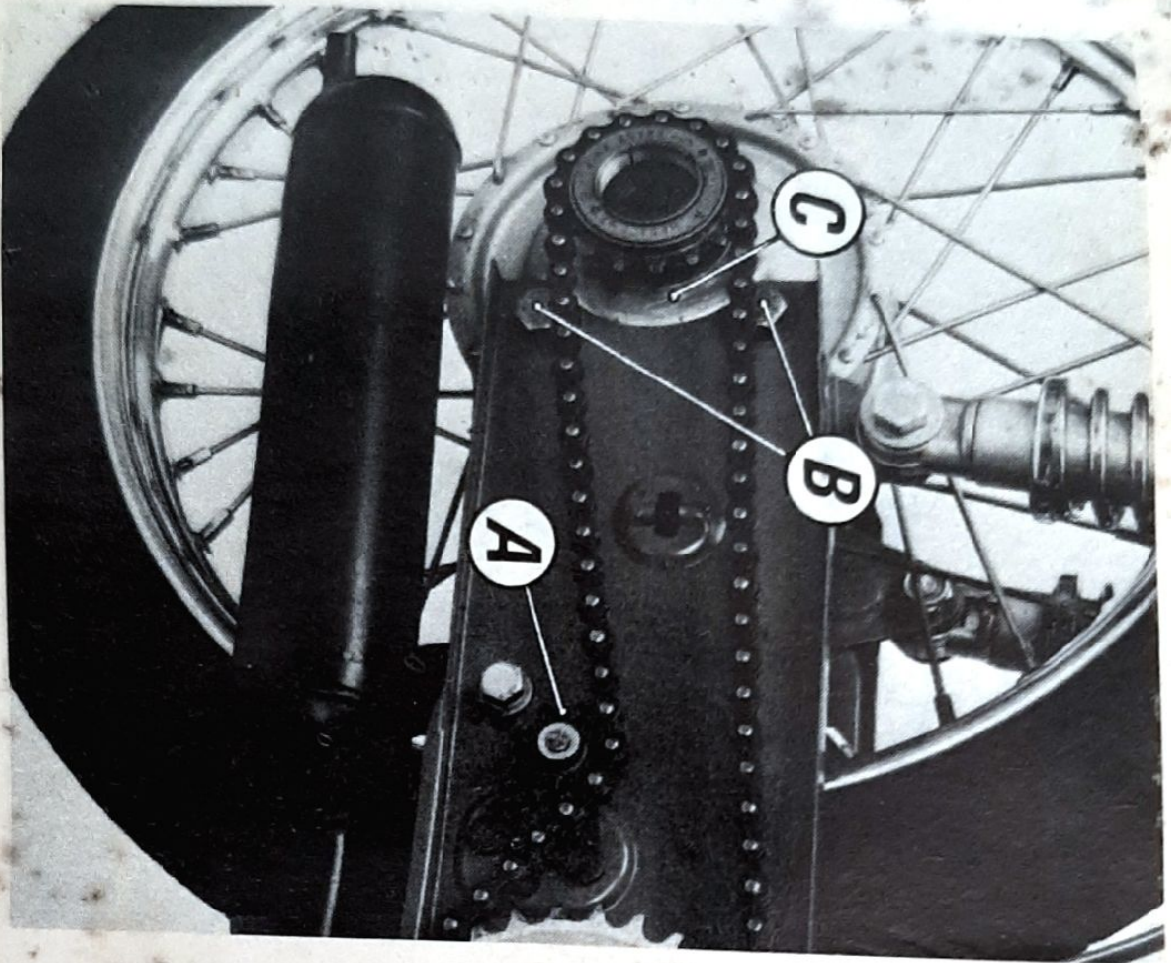


Fig. 17

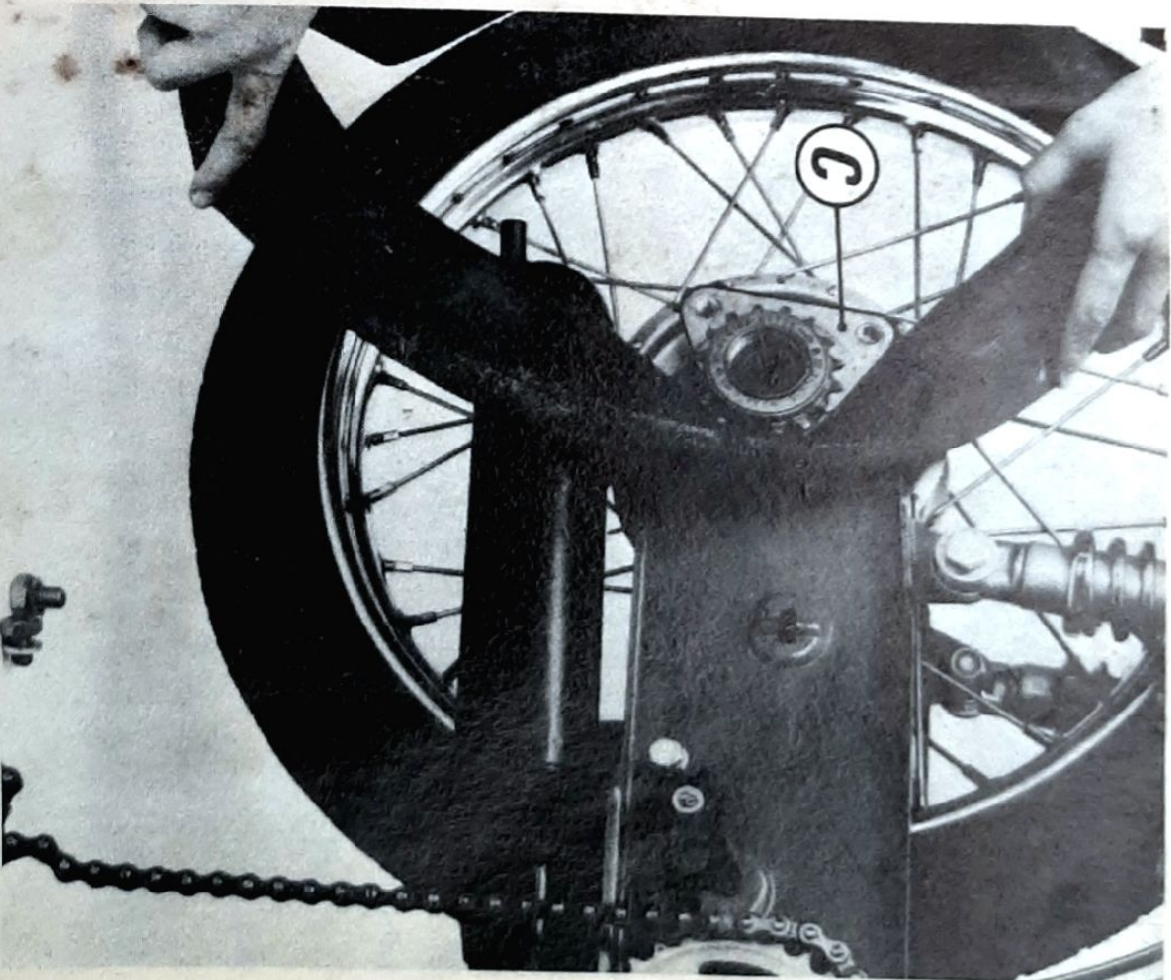


Fig. 18

WHEEL REMOVAL

To remove the front wheel take off the two nuts retaining it on the fork and disconnect the brake cable.

To remove the rear wheel, take off the side covers (fig. 19) disconnect the brake cable (fig. 19 « B ») and detach the chain from the free wheel sprocket on the side opposite to the one in fig. 19, remove the rear pulley (nut « C » fig. 19) remove the four mounting bolts (two of these can be seen « D » fig. 19, the others are on the opposite side of the machine).

When reassembling the rear wheel, besides checking the rear brake adjustment (page 18) recheck the chain tension (page 19).

Similarly during the reassembly of the

front wheel, recheck the front brake adjustment.

FLYWHEEL MAGNETO: CHECKING CONTACT BREAKER GAP

The checking and the adjustment of the contact breaker, in case of faulty ignition, can be carried out with the clutch mounted (in fig. 20) the clutch is removed in order to indicate easily, the contact breaker and its components. Remove the plug « A » by means of a screwdriver loosen the screw « B » then insert the screwdriver in the notch « C » and adjust the points gap « D » to 0.4 mm. (0.015") (if possible check with a feeler gauge). Then tighten the screw « B ».

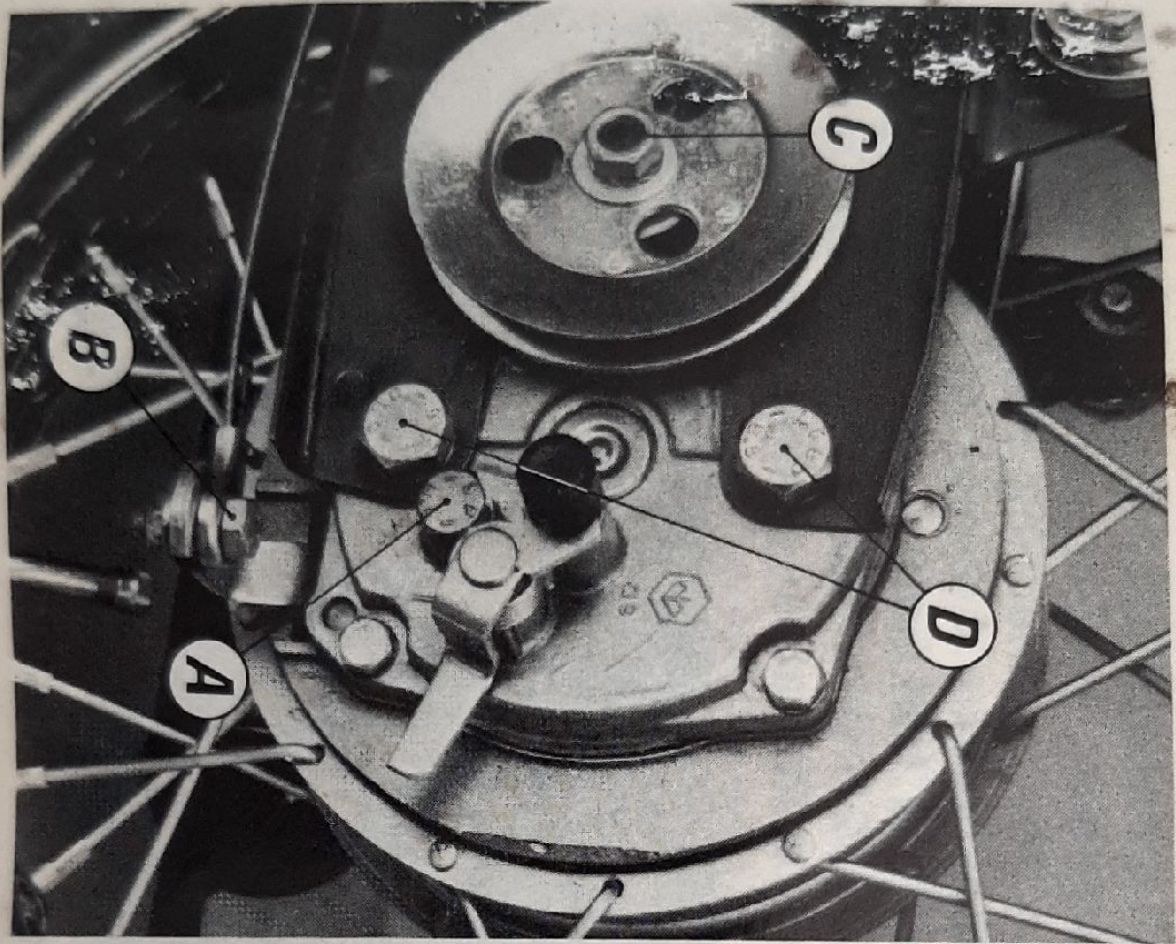


Fig. 19

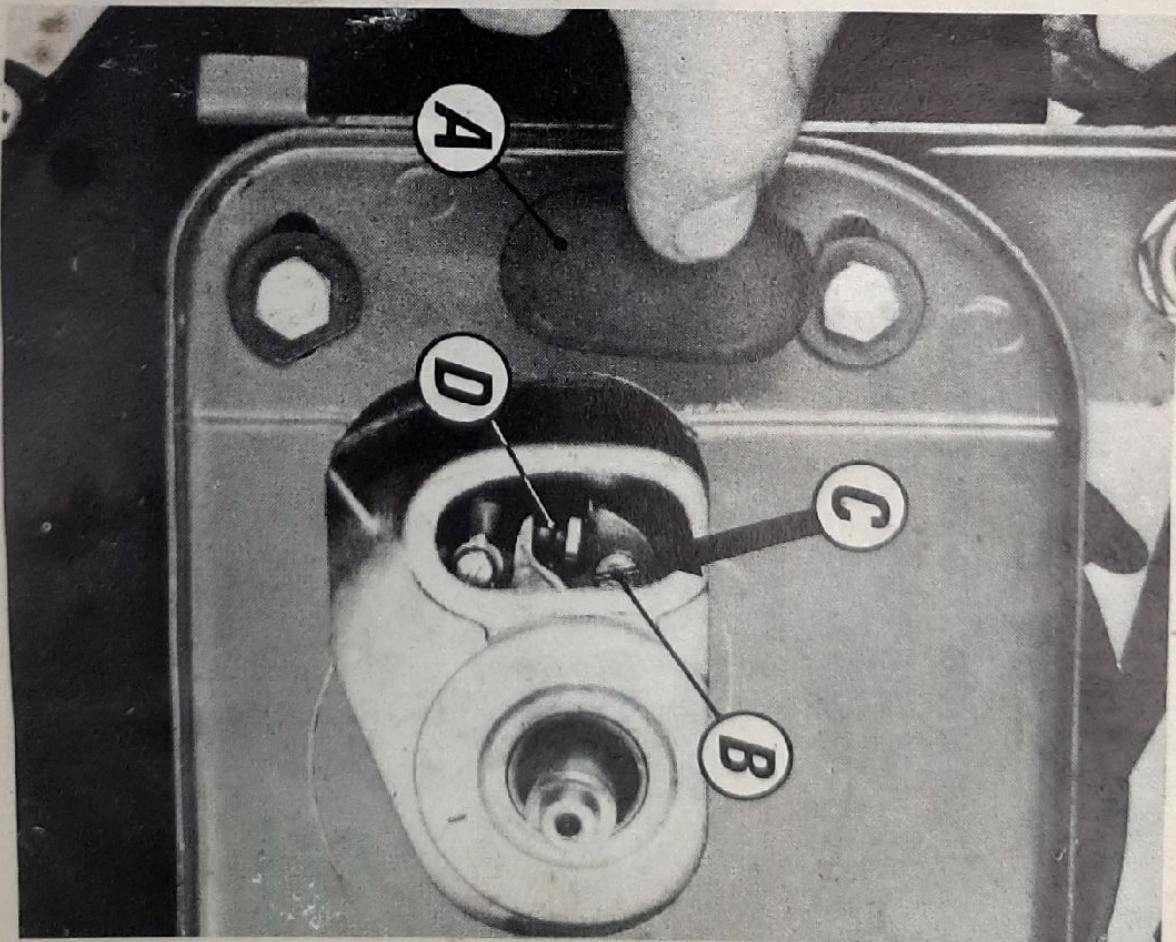


Fig. 20

DISMANTLING OF ENGINE SUB FRAME ASSEMBLY

To dismantle the sub frame assembly (only for general overhaul) proceed as follows:

Disconnect the brake cable, decompressor, fuel pipe, electrical cables by the connecting plugs and remove the bolts « A » and « B » fig. 21, one of the two bolts « B » can be seen in fig. 21 the other is situated on the opposite side of the machine.

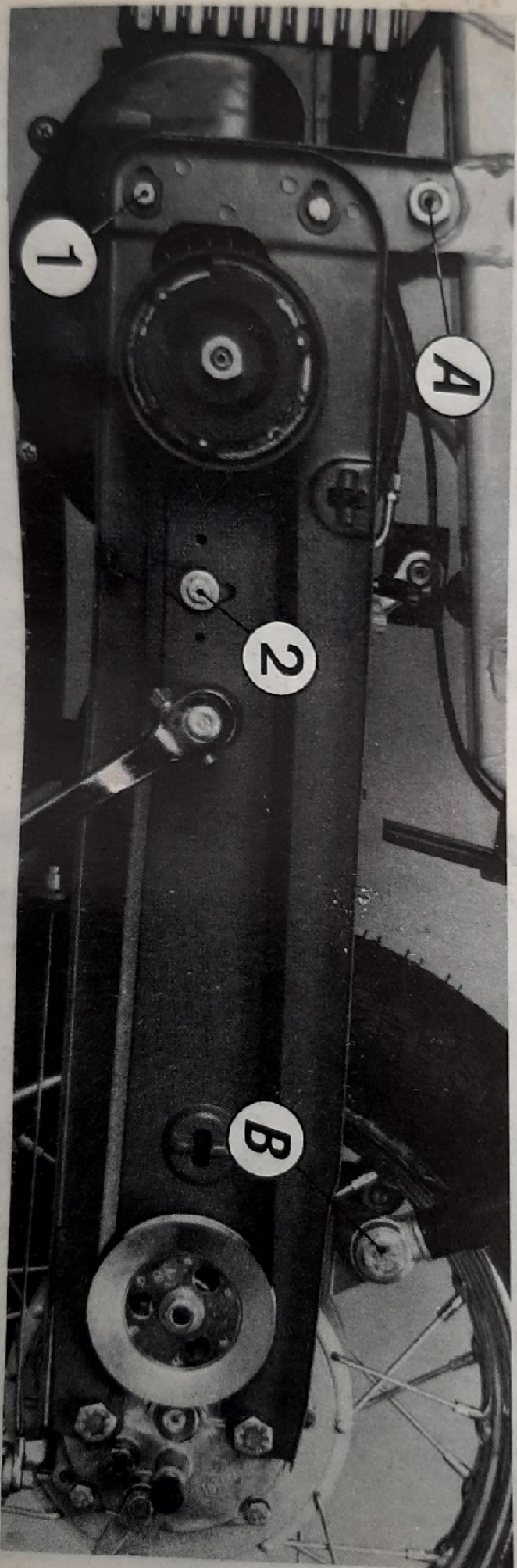


Fig. 21

maintenance

In case of faulty ignition, check the spark plug gap 0.5 mm. (0.019") maximum and clean in neat petrol (see page 16 also). If there is evidence of defects in the insulation or excessive wear of the electrodes, replace the spark plug using the same type as the original. If the fault persists check, clean and adjust the contact breaker points (page 24).

Every 4.000 Km (2.500 miles) remove carbon deposits from the silencer exhaust tube using a suitable scraper, remove carbon deposits from the cylinder head (page 18) and the piston crown and cylinder exhaust port. Remove the air filter and clean in pe-

trol (page 16).

Every 8.000 Km. (5.000 miles) check oil in rear hub (ESSO GEAR OIL 90, see page 11 and fig. 19).

Check the oil level in **telescopic suspension** with the machine upright the oil must be level with the lower edges of the caps bearing the word "Oil" (on the outer sides of the fork sliders). Oil used ESSOLUBE 20 W, quantity contents, 30 g. for each leg of the fork.

At intervals lubricate the chain, pedals and wheel pivot points, check the chain tension (fig. 15 and page 19). Clean the carburettor (page 16).

Summary of maintenance and lubrication instructions

MAIN OPERATION TO BE CARRIED OUT

EVERY 4.000 Km. (2.500 miles) Remove carbon deposit from silencer, exhaust tube, cylinder head and piston crown.
Clean air filter (in petrol).

EVERY 8.000 Km. (5.000 miles) Check oil in rear hub. **Esso Gear Oil 90**
Check telescopic suspension oil (front). **Essolube 20 W**
Grease roller housing. **Esso Beacon 3**

At regular intervals clean the spark plug, lubricate chain and check chain tension.

Engine: every refuelling (lubricate by petrol mixture).
2% (50:1) petrol/
oil mixture 20 cm³
for 1 litre petrol.

fault finding and remedies

Should faults arise in the operation of your moped proceed as follows:

a) **Non starting or sudden stopping of the engine (carburation or ignition faults).**

1) **Main fuel supply exhausted.** Turn the tap to the reserve position and refuel as soon as possible.

2) **Fuel tap closed.**

Open the tap.

3) **Spark plug dirty (or defective) incorrect gap.**

Clean (or replace) the spark plug (see page 16) and check the gap between the electrodes does not exceed 0.5 mm (0.020").

N.B. - If vehicle is used for short journeys at low speed it is advisable to use a Bosch spark plug W95 T1 or equivalent.

4) **In cold weather:**

Allow the engine to warm up before pulling away. If following the previous operations the faults persist, check the following:

5) That carburettor is not blocked or dirty also main jet and fuel pipe.

Dismantle and clean (see page 16).

6) Contact breaker points dirty, damaged or defective.

Clean (or if necessary, replace) the contact breaker; adjust the points gap to 0.4 mm. (page 24) (0.015").

7) That the H.T. spark plug lead has not become earthed.

If the cable is damaged, repair with insulating tape or replace with new cable.

b) Mechanical faults:

1) Engine falters - Irregular running.

Clean the spark plug and remove carbon deposits from silencer, cylinder head and piston crown, also the cylinder exhaust port. Clean the carburettor and filter (see page 16).

2) Lack of power:

Check the spark plug and cylinder head for security. If "drive slip" see the instructions on page 21.

3) Inefficient rear braking:

Check for oil leak in the rear brake drum.

4) **Noisy or faulty suspension:**

Check the front suspension oil level (see page 27) if rear suspension is faulty check the shock absorber springs.

Laying up - If the machine is to be laid up, clean and lubricate, remove the fuel and store machine with wheels off the ground. To protect the engine, remove the spark plug and inject a small quantity of 30 SAE oil through the spark plug hole, operating the pedals to turn the engine and replace the spark plug.

HOW TO CLEAN THE VEHICLE

For the outside of the engine use paraffin oil, brush and clean rags. Remove all traces of oil and wash the painted parts with water using a sponge and dry off with a chamois leather. Clean chromium plated parts with a proprietary brand of chrome cleaner.

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4th edition

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