

dbA
ec1

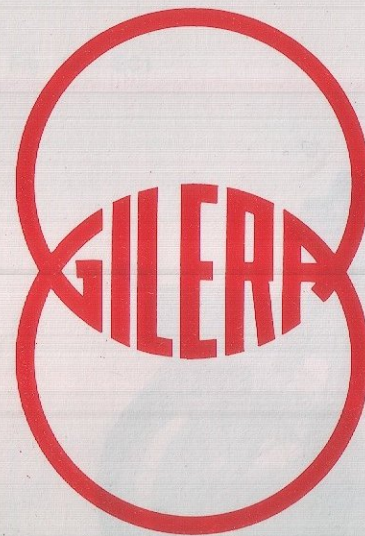
GRAFICA SAINI - TRIUGGIO

USE and MAINTENANCE

NOTE:

The information given in the following pages generally refer to both the Gilera CBA and EC1 mopeds.

Where there are differences, alternative specifications or details are given.



cba
ec1

USE and MAINTENANCE

Fig. 1 - CBA



Fig. 1a - EC1



We would like to express our appreciation for your choice, and to thank you for your preference.

Your Gilera moped is one of our most recent developments. It is the result of the most advanced techniques, and the product of our long experience. This means that you now 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 herein in order to obtain the best results.

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.

NOTE

To maintain your Gilera moped in a perfect and efficient condition and to benefit fully from the guarantee given in your purchase contract, we recommend that you always refer your repairs to « Piaggio Service » and authorised Gilera dealer.

You will easily recognise them from the trade mark Piaggio and the Gilera symbol.

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



STEERING LOCK

To lock handlebar, turn it fully to the left, turn the key half a turn clockwise, at the same time pressing it inwards. Remove the key.

To unlock handlebar, rotate the key half a turn anti-clockwise.

The key can be withdrawn from the lock in either the locked or unlocked position. *Important: Record the key number of your machine as it is the only way of identifying it should the occasion arise to ask for replacement keys.*

NOTE FOR MODEL EC1 ONLY

Before refuelling, slacken the air valve located at the top of the frame beneath the saddle (Fig. 2).

After re-fuelling, re-tighten valve.

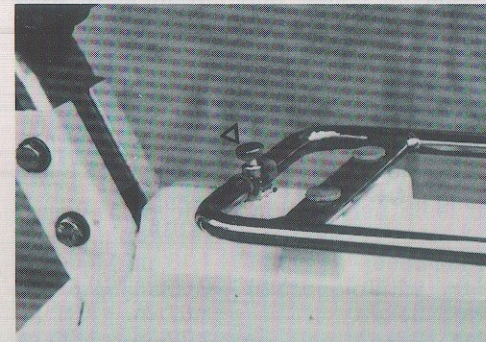


Fig. 2

Performance and general characteristics

Operation with a 2% (50:1) pure SAE 30 oil mixture.

Fuel consumption: (CUNA standards) 1.6 litres per 100 Km. (170 mpg. approx).

Max. speed: conforms to current legislation.

Fuel tank range: 300 Km. approx. (186 miles) (EC1 250) (155 miles).

Petrol tank capacity: 4.7 litres (1.03 imp galls) including 1/2 litre reserve (0.1 imp galls) EC1 4.5 (0.99 imp galls).

	CBA	EC1
Wheelbase:	1.13 m.	1.04 m.
Max. width	0.65 m.	0.67 m.
Max. height	1.07 m.	1.01 m.
Max. length	1.72 m.	1.55 m.
Dry weight	52 Kg.	44 Kg.

Engine: two stroke, rotary valve induction.

Number of cylinders: one.

Cylinder bore: 38.2 mm.

Piston stroke: 43 mm.

Piston displacement: 49.28 cu.cm.

Compression ratio: 9:1.

Ignition: external H.T. coil fed by fly-wheel magneto. A.C. current 6V-18W.

Spark plug: Marelli CW4 N-AT or Bosch W95T1, Champion L90 and AC 45F.

Ignition advance: 19.5° before T.D.C. (EC1 19°).

Gear with automatic speed variator, which selects automatically the engine wheel ratio most suitable for the prevailing driving conditions.

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 an automatic variator, expanding pulleys, vee belt, automatic clutch and reduction gear.

Engine/wheel ratios:

CBA	$\frac{1}{12.76}$	÷	$\frac{1}{24.03}$
EC1	$\frac{1}{10}$	÷	$\frac{1}{20}$

Without speed variator

The drive from engine to wheel is by means of a vee belt, automatic clutch and reduction gear.

For the belt adjustment see fig. 14.

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

VEHICLE:

Frame: cold drawn and welded steel tubes incorporating fuel tank.

Front suspension: telescopic fork.

Brakes: internal expanding type on both wheels.

Wheels: tangent spoke wheels with steel rims or light alloy wheels

front 16" type WM 1/1.5
rear 16" type WM 1/1.5

EC1: 3.00 x 12" both front and rear.

Tyres: front and rear 2½ x 16" ribbed.
EC1 3.00 x 12" ribbed.

Light alloy wheels

During tyre removal and reassembly make sure you do not damage the wheel rim.

The tool kit is contained in a bag located, together with this book, in a container under the saddle.

EC1: in the housing provided in the rear fairing.

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 right side of bracket.

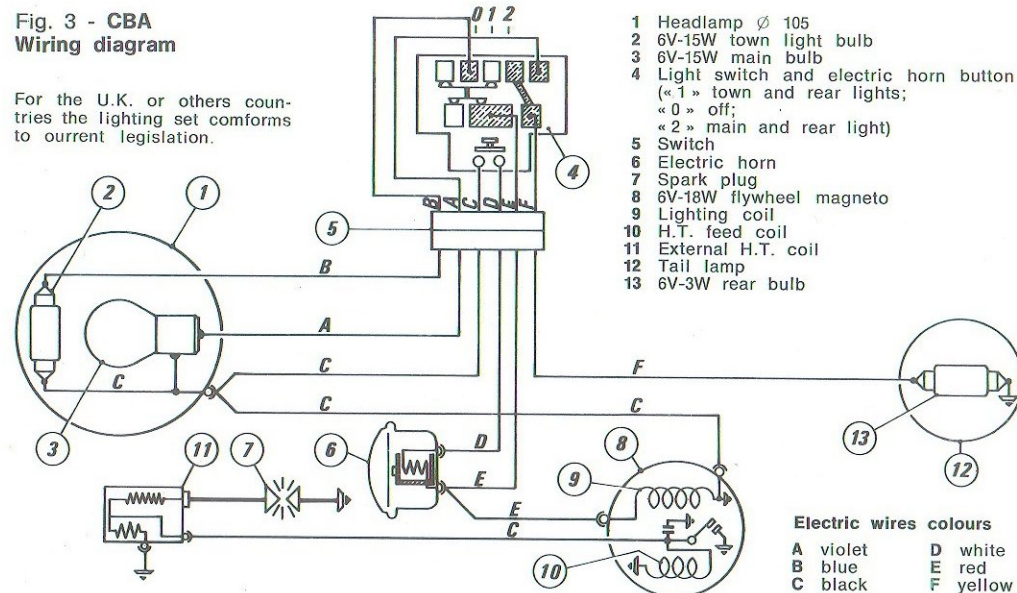
EC1: on right off-side of headstock.

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 - CBA
Wiring diagram

For the U.K. or others countries the lighting set conforms to current legislation.



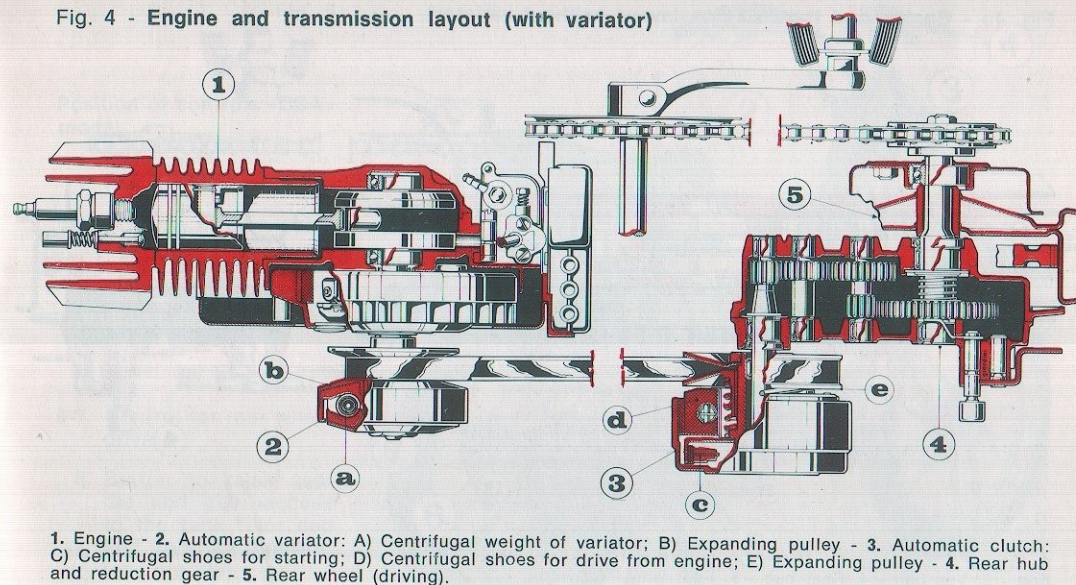
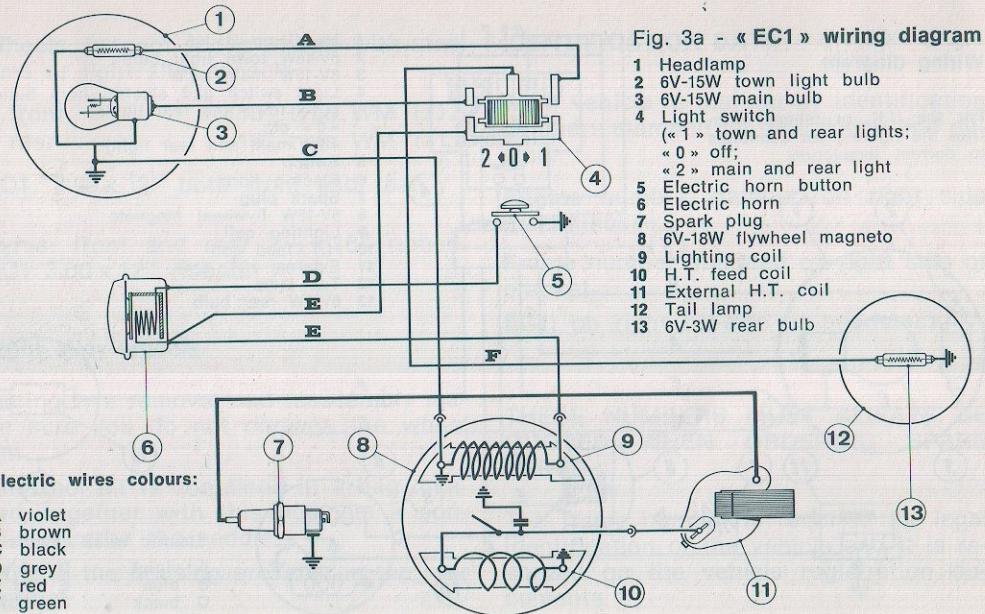
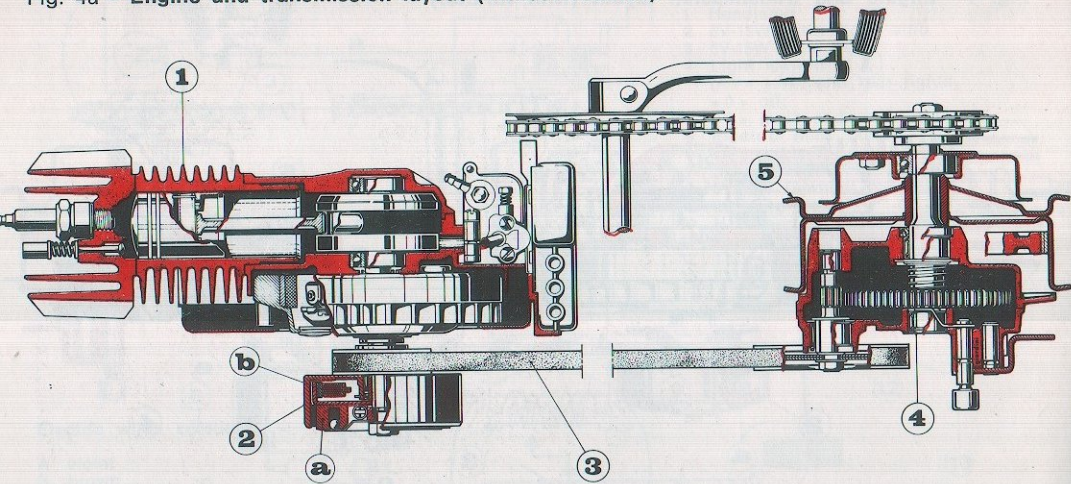


Fig. 4a - Engine and transmission layout (without variator).



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

Fig. 5

Position of controls «CBA» model

1. Rear brake lever
2. Decompression valve control
3. Throttle control
4. Front brake lever
5. Pedal
- 6-7. Control for rear wheel drive
8. Button to raise saddle and gain access to the tank filler cap and tool kit housing (see fig. 16).

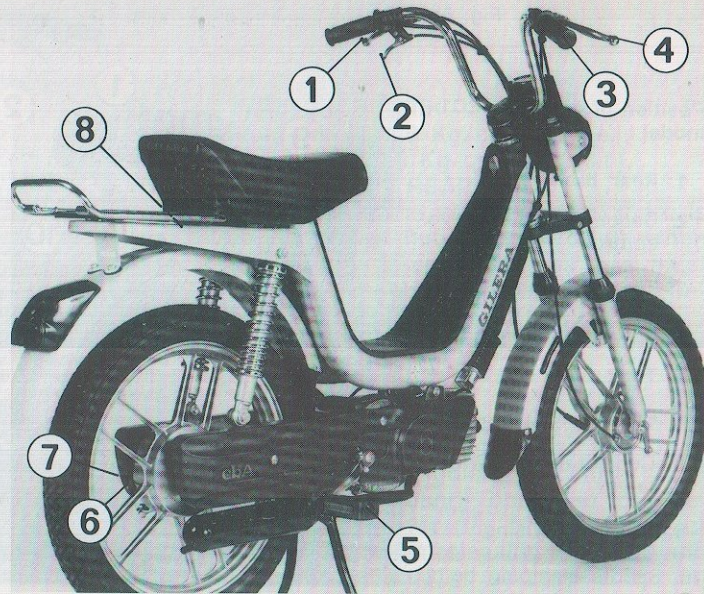
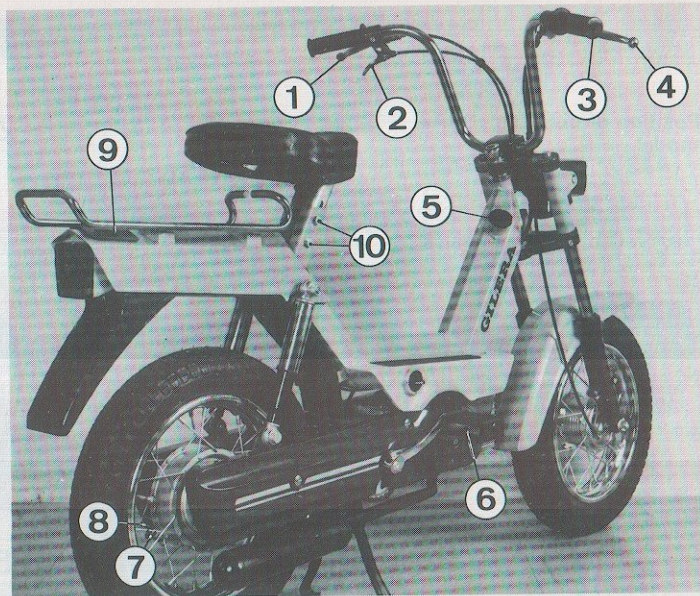


Fig. 5a

Position of controls «EC1» model

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 rear wheel drive
9. Tool kit housing
10. Saddle clamping bolts



Driving instructions

MIXTURE REFUELLING

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

N.B. - To prevent the possibility of an airlock in fuel tank, 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 500/1000 Km (300/600 miles) check nuts and bolts for security (particularly those retaining the engine to the frame).

TYRE PRESSURE

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 re-fuelling hole (see fig. 19 «A»). Oil used: ESSO GEAR OIL 90 or equivalent.

STARTING ENGINE

Carry out the operations (fig. 6). 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.

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 «ON» position as in fig. 6) - C) Keep throttle control lightly open - D) With cold engine depress the choke lever - E) Operate the pedal.

N.B. - It is advisable to use the decompression lever (fig. 5a N. 2) also to start on the centre stand.

When the engine starts, open throttle control and the choke lever «D» returns automatically to the running position.

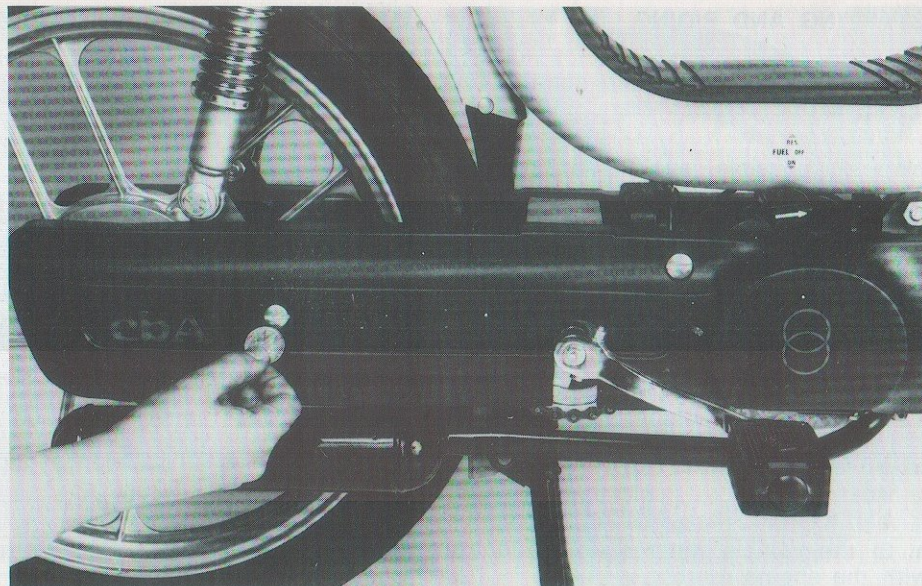
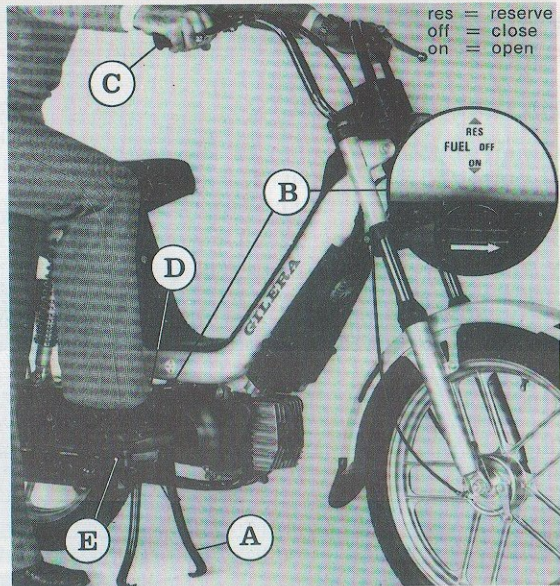


Fig. 7

STARTING AND RIDING

Operate the throttle which controls the speed of the vehicle.

Note: If possible, avoid starting when the vehicle is on the centre stand, as 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 the reduction gear and cause damage.

STOP WITH ENGINE RUNNING

If the throttle control is closed (Fig. 5 n. 3) the vehicle will remain stationary with the engine running.

STOPPING ENGINE

Close the throttle control and operate the decompression lever (Fig. 5a n. 2).

USE AS A BICYCLE

Push in the button (see Fig. 8), to disconnect the rear wheel from the drive. To reconnect the rear wheel to the drive, operate the lever (see Fig. 9), which automatically returns the button to the normal position. These operation **must** be carried out with the engine stopped.

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.

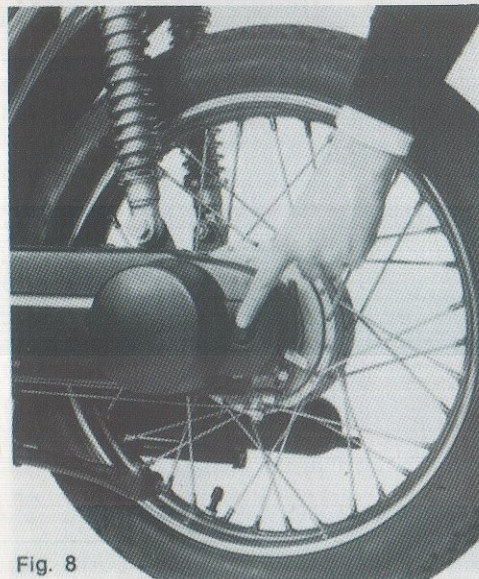


Fig. 8

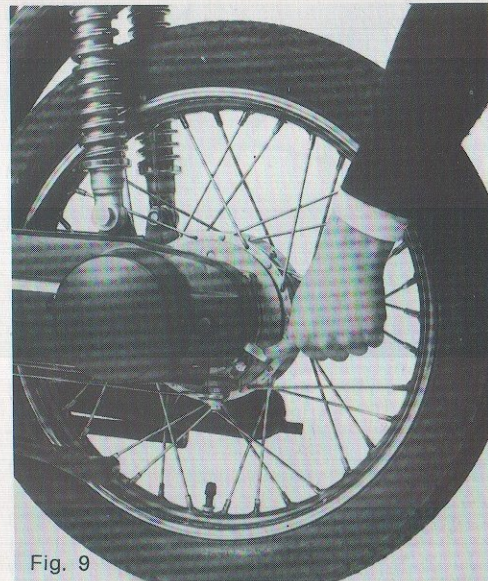


Fig. 9

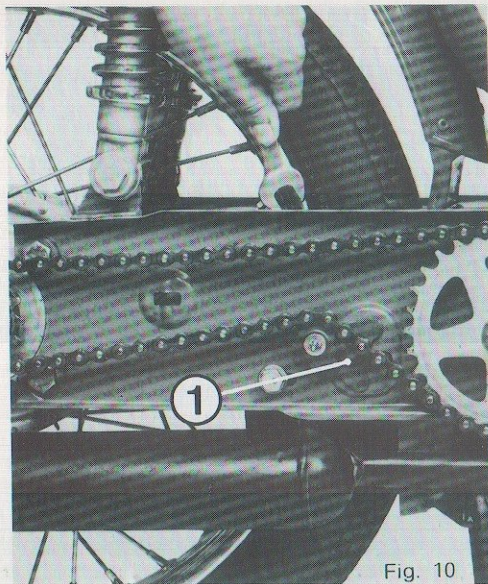


Fig. 10

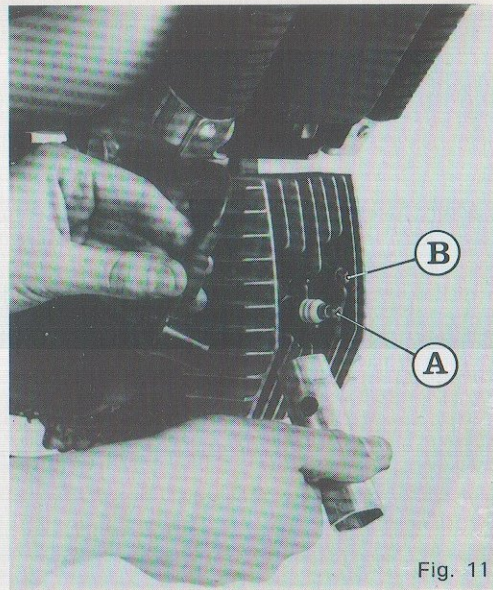


Fig. 11

AIR CLEANER DISMANTLING

Remove the upper engine cover using a screwdriver. Loosen the air cleaner fixing screw (see fig. 13 « A »). Remove the air cleaner.

EC1

Remove the chain cover and the right foot plate, release the two fasteners by means of a screwdriver. 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 screws « E » of fig. 13 and remove the carburettor cover; slacken the screw « H » of engine/carburettor fixing collar. The carburettor can be withdrawn by slight rotation. The

carburettor 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 adjuster « B » otherwise it will result in faulty throttle operation.

CARBURETTOR ADJUSTMENT

To adjust throttle cable « end play » rotate the adjuster « B » fig. 13. To adjust slow running, rotate through the hole « C » the screw « D » using a screwdriver. The slow running adjustment must be carried out when the rear wheel is free from the ground (vehicle on its centre stand) adjust the screw « D » 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 »).

REPLACEMENT OF BULBS

To replace the tail lamp bulb remove the lens fixing screw and dismantle. To gain access to the bulbs in the headlamp, loosen the headlamp ring retaining screws.

EC1: loosen the headlamp ring retaining screws.

BRAKE ADJUSTMENT

To adjust brakes, rotate the adjusters « A » fig. 12. When the brake levers are released, the wheels must turn freely.

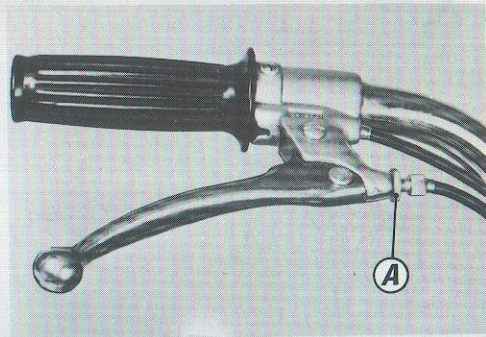


Fig. 12

CHAIN ADJUSTMENT

To adjust the chain tension, slacken the nut of chain tensioner (fig. 10 « 1 ») and adjust as necessary, then retighten the nut.

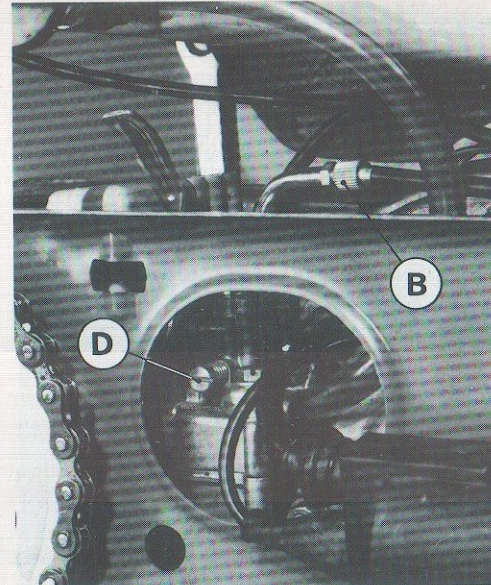
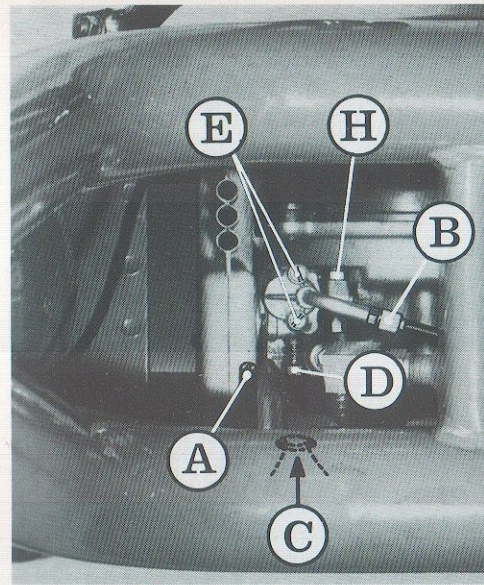


Fig. 14

BELT ADJUSTMENT FOR VERSIONS WITHOUT VARIATOR

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 fasteners 1-2) and operate the lever n. 1 of fig. 14 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:

- 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 station-

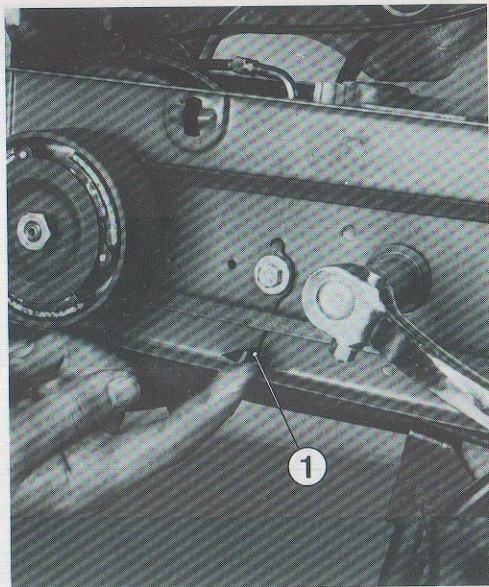


Fig. 14

nary 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.

ADJUSTMENT OF SADDLE, HANDLEBAR AND HEADLAMP

Saddle To raise saddle push in the button « B » (fig. 16) to gain access to tank filler cap « A ».

EC1 To adjust saddle height slacken the bolt clamping it to the frame (fig. 15). After adjustment, retighten the bolt.

To gain access to toolbag unscrew the knob located under the electric horn and open the toolbox.

To adjust the handlebar position, loosen without removing the four clamping nuts, retaining the handlebar on the fork. Then rotate the handlebar on its rest in order to obtain the best drive position. To adjust the headlamp beam (high or low) loosen the side screw and pivot headlamp as necessary.



Fig. 15

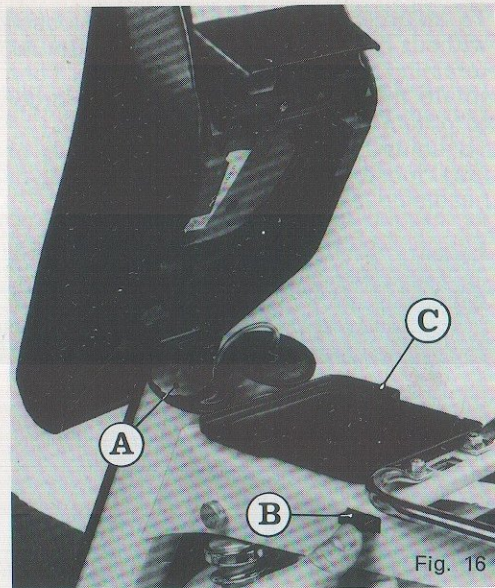


Fig. 16

REAR WHEEL INNER TUBE REMOVAL

To remove rear inner tube from tyre, remove the chain cover (fig. 7) 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.

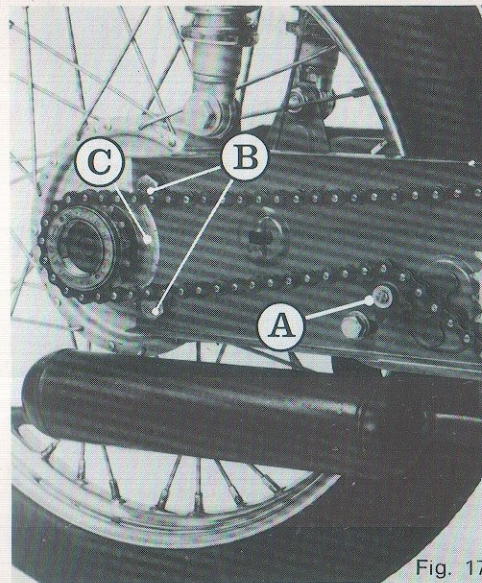


Fig. 17

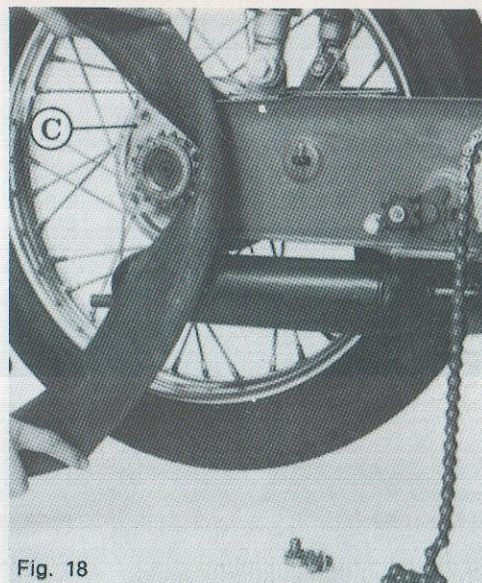


Fig. 18

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. 7) 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 (pag 22) recheck the chain tension (page 22).

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 expose 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 ».

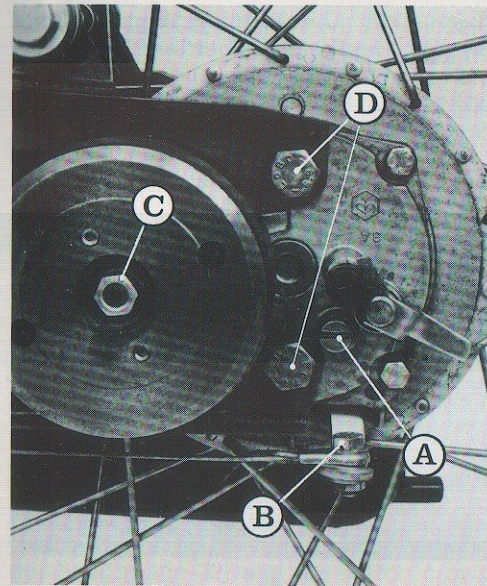


Fig. 19

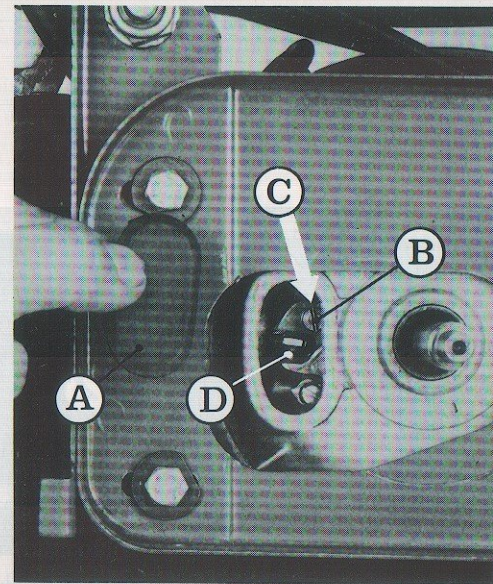


Fig. 20

DISMANTLING OF ENGINE/SUB FRAME ASSEMBLY

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

Disconnect the rear 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.

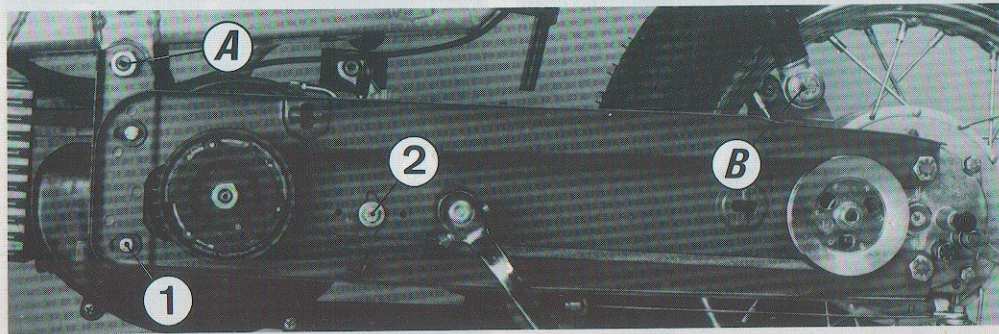


Fig. 21

Maintenance

In case of faulty ignition, check the spark plug gap 0.5 mm. (0.020") maximum and clean in neat petrol « see page 18 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 28).

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 22) and the piston crown

and cylinder exhaust port. Remove the air filter and clean in petrol (page 21).

Every 8,000 Km. (5,000 miles) check oil in rear hub (ESSO GEAR OIL 90, or equivalent) see page 15 and fig. 19). Fill with grease ESSO BEACON 3 or FIAT JOTA 3 the roller housing (fig. 4 « A »). (This operation is not valid for version without variator).

At intervals lubricate the chain, pedals and wheel pivot points, check the chain tension (fig. 10 and page 22). Clean the carburettor (page 21).

Summary of maintenance and lubrication instructions

MAIN OPERATION TO BE CARRIED OUT

EVERY 4000 Km (2500 miles) Remove carbon deposit from silencer, exhaust pipe, cylinder head and piston crown. Clean air filter (in petrol).

EVERY 8000 Km (5000 miles) Check oil in rear hub.
Grease roller housing.

This operation is not valid for version without variator.

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

Engine: ever refuelling (lubricate by petrol mixture).

EC1: In addition check the oil level in telescopic suspension with the machine upright, the oil must be level with the lower edges of the cap bearing the word «Oil» (on the outer sides of the fork sliders). Oil used ESSOLUBE 20W: 30 g. for each leg of the fork.

Esso Gear Oil 90
Esso Beacon 3

2% mix. (50 : 1) petrol/oil mixture 20 cu.cm. for 1 litre of petrol.

How to check your machine

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 18) 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 28) (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 21).

2) Lack of power:

Check the spark plug and cylinder head for security.

If the transmission is erratic: check the grease in the roller housing of the variator (see page 31).

For version without variator, if « drive slip » see the instructions on page 24.

3) Inefficient rear braking:

Check for oil leak in the rear brake drum.

4) Noisy or faulty suspension:

Check and if necessary replace the bottom rubber bushes inside the telescopic fork and grease the springs.

If rear suspension is faulty check the action of the shock absorber springs.

EC1: Check the front suspension oil level, see page 32.

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 quan-

tity of 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 clothes.

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.

Index

Characteristics	page	6	Adjustment, control, dismantling	
Electrical system	»	9-10	Air cleaner and carburettor	page 21
Engine and drive layouts	»	11-12	Cylinder head	» 22
Driving instructions	»	13-15	Bulbs	» 22
Running in	»	15	Brake adjustment	» 22
Tyre pressure	»	15	Chain	» 22
Rear hub oil checking	»	15	Belt	» 24
Starting riding and stopping	»	15-16	Saddle, handlebar, headlamp	» 25
Stopping engine	»	18	Rear inner tube removal	» 26
Use as bicycle	»	18	Flywheel magneto	» 28
Spark plug removal	»	18	Dismantling of engine subframe	» 30
			Maintenance	» 31
			Fault finding	» 33

1st. Edition

The descriptions and illustrations included in this publication are not binding, therefore the Gilera factory reserves the right, providing the essential characteristics of the type here described and illustrated, are maintained, to introduce at any moment, any modification to parts, details or any exigence structural or trade, without simultaneously undertaking to revise this publication.

GILERA FACTORY - 20043 Arcore (MI) - Via Cesare Battisti 68 - Tel. (039) 617.841/2/3/4/5
Ufficio Tecnico Commerciale - Dis. n. 313.127 - Proprietà riservata -