vespa 125 primavera

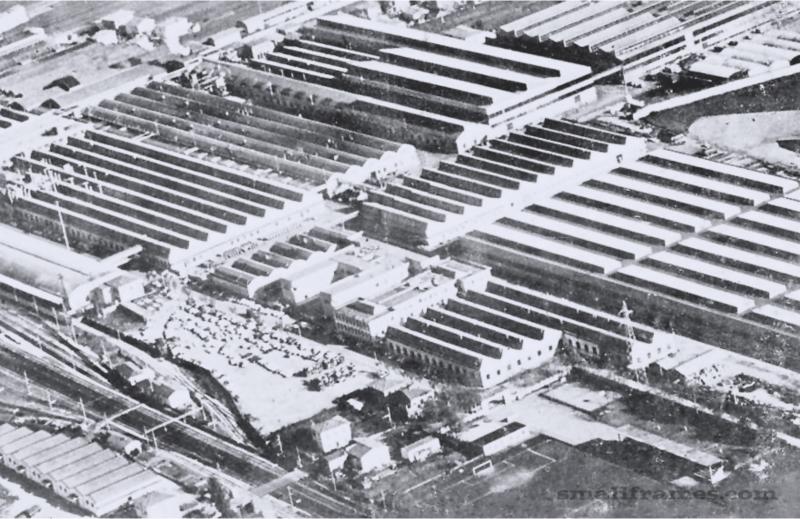
ET3





PIAGGIO is one of the largest manufacturers of two-wheelers in the world.

The headquarters are in Genoa. Its works in Pontadera, Pisa, Arcore are provided with very modern equipment operating on the basis of the most advanced techniques.



#### introduction

Piaggio has now delivered a safe, highly efficient vehicle; a small mechanical masterpiece in which the perfection of the machinery is accompanied by a rigorous simplicity of design.

Congratulations, Yours was a good choice. The best!

The new 125 "ET3" (electronic three transfers) will surprise you with the liveliness of its pick-up, its high maximum speed, its ease of starting and its perfect functioning in all conditions of use thanks to the new electronic ignition system adopted on the most prestigious Vespa models.

In the new Vespa 125 "ET3" Piaggio has condensed the continuity of its technique: in fact, under the grace of a line "pure" and elegant, solid structures is concealed a generous engine, which needs little care in order to be always in full working order.

In this booklet you will find simple directions: follow them, and your vehicle will enjoy good health for many years!

#### CONTENTS

Vehicle description Page	4	Electrical system Page 15
Performance and specifications . "	9	Maintenance
Identification data	11 12	Laying up
Tyre pressures "	12	Tables for lubrication and
Fuel supply	12	periodic maintenance " 34-35
Running-in		Fault finding

## vespa 125 primavera "ET3"



smallframes.com

### vehicle description

#### **ENGINE**

The engine (see performance and specifications on page 9 and section fig. 1) is pivoted elastically, by means of the crankcase swinging arm, clutch side, to the chassis of the vehicle.

The rear wheel (drive-wheel) is fitted on the end of the output shaft of the gearbox.

#### LUBRICATION

Lubrication of the engine (piston, cylinder, crankshaft, main bearing on the flywheel side) effected by the oil in the fuel mixture.

#### FUEL SUPPLY

Gravity fed, with petrol (gasoline) and oil mixture (Fig. 9).

Carburettor with slide throttle. Air intake inside the body.

Fuel tank capacity  $\approx 5.6$  It (1.23 imp. gall, 1.48 U.S gall.) including  $\approx 1$  It. (0.21 imp. gall, 0.26 U.S gall.) of reserve with 3-way fuel tap (closed, open, reserve). Throttle control twist-grip (right side of the handlebar).

#### IGNITION

By means of an electronic unit with H. T. coil incorporated. Connected to three outputs of the special flywheel.

#### COOLING

Realised by a centrifugal fan.

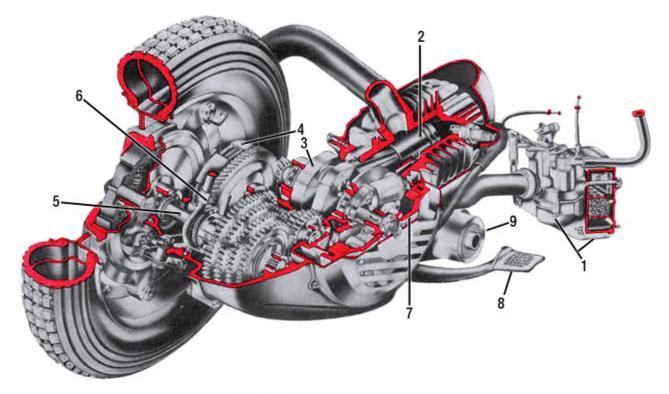


Fig. 1 - Section of the motor

- 1. Carburetor and air cleaner assembly 2. Piston 3. Crankshaft 4. Clutch 5. Main shaft and gear pinon assembly -
- 6. Gear shifter 7. Flywheel 8. Kickstarter 9. Crankcase swinging arm clutch side (pivoted the frame).

#### CLUTCH

Multiple discs.

Controlled by a lever on the left end of the handlebar, with adjustable and flexible control cable.

#### **GEARBOX**

A 4-speed constant mesh gears.

Controlled by twist grip connected to the clutch lever (left of the handlebar). For details of transmission to motor see wheels, page 10.

#### **EXHAUST SILENCER**

A screw clamp is fitted that allows removal of the exhaust silencer; therefore, cleaning operations (de-carbonising) will be easier to perform.

#### FRAME

Pressed sheet steel monocoque bodyshell, streamlined type structure. On the rear left side there is located a glove compartment with door fitted with a key operated security lock.

#### HANDLEBAR

Cast in light alloy, internal controls. with Ø115 headlight and speedometer. It is designed to allow fitment of a windscreen (accessory).

#### STEERING AND SUSPENSION

The steering column is pivoted on the front wheel swinging hub. Front and rear suspension with coil spring and hydraulic dampers.

Saddle: dual seat.

Steering lock (key operated) on the steering column.

WARNING - Make a note of the number stamped on the keys that came with the vehicle in case of a request for spare parts there is no other possibility of identification.

#### WHEELS

interchangeable, having pressed sheet steel rims of 2.10", on which are fitted tyres of type 3.00x10".

#### **BRAKES**

**drum brakes**, with flexible and adjustable control cables.

 Front hand-operated (lever on the right handlebar).  Rear operated pedal located on the platform (right side of the vehicle).

#### TOOLS KIT

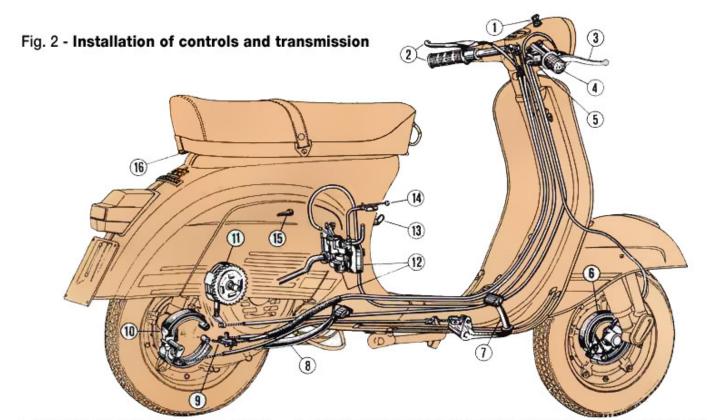
Wrenches: A socket wrench with 11, 13 and 21mm openings

A double-ended spanner with 11mm and 13mm openings, two flat wrenches with 7mm and 8mm openings.

#### A screwdriver.

The tool kit is contained in a canvas roll placed together with this booklet, the toolbox under the seat.

WARNING - To access the bag for tools you need to lift up the seat (see Fig. 5).



1. Key switch (for positions see figs 8 and 9) - 2. Clutch control (lever) and gear change (twist grip) - 3. Front brake lever - 4. Throttle twist grip - 5. Handlebar switch - 6. Front brake shoes - 7. Rear brake pedal - 8. Kickstarter - 9. Gear selector adjusting screws - 10. Rear brake shoes - 11. Clutch - 12. Carburettor and air cleaner - 13. Fuel tap - 14. Choke control - 15. Lever for removing engine cover - 16. Lever for opening seat (tilting)

## performance and specifications

This vehicle runs with 2% mixture of SAE 40 mineral oil.

**Consumption** (CUNA standards):  $\approx$  2.1 liters per 100 Km (134.5 mpg imp. / 112 mpg U.S.)

**Tank capacity:**  $\approx$  lt. 5.6 (1.23 Imp. gall. / 1.48 U.S. gall.) including reserve of  $\approx$  1 lt. (0.23 imp. gall. / 0.26 U.S. gall.)

Maximum speed: Over 90 Km/h (56 mph).

Range of over 265 km (164 miles)

Carrying capacity: rider, passenger and 10 kg (22 lb) of luggage.

Wheelbase: 1180 mm (46.5")

Handlebar width: 680 mm (26.8")

Total length: 1665 mm (65.6")

Max height: 1005 mm (39.6")

Min. ground clearance: 225 mm (8.9")

Turning radius: 1650 mm (64.9")

Total dry weight: 78 Kg (172 lb)

**ENGINE:** single cylinder, two-stroke, with rotary distribution and three transfer ports.

**Bore:** 55 mm (2.16") - **Stroke:** 51 mm (2.01")

**Displacement:** 121.16 cm<sup>3</sup> (7.39 cu in)- **Compression ratio:** 9.25 - **Ignition timing:** 18° ± 1° BTDC

Spark plug: Bosch W 240 T1 or AC 445 Z; Marelli CW 7N; Lodge 3HN; Champion L82; NGK B7 HS.

**Ignition:** electronic with H. T. coil built-in, powered by a unique flywheel.

The system offers noteable advantages, allowing among other things to achieve a spark with very high voltage in a very short time, and with very limited total duration.

#### Hence:

- Normal operation even with dirty spark plug
- 2) Easy cold starting.
- Very good ignition and combustion of fuel
- Low wear of the electrodes resulting in higher spark plug life.
- 5) Timing remains unaltered over time, given the lack of traditional mechanical

devices subject to wear (cam, points, etc.).

Kick start (on the right side of the vehicle), after inserting and rotating key switch in position 1 (Fig. 6).

Carburettor: Dell'Orto SHB 19/19.

**Transmission:** 4-speed gearbox controlled by a twist grip connected to the **clutch** lever (left handlebar).

Wheels: Interchangeable pressed steel wheels with 2.10". Tyres 3.00x10".

**Gear Ratios** engine to driven wheel:

1st gear 1:14.74

2nd gear 1:9.80

3rd gear 1:7.06

4th gear 1:5.31

**Electrical system** powered with alternating current (flywheel 6-pole, rated voltage 6V).

#### Identification data:

The identification numbers consist of the prefix VMB1T on the frame and VMB1M on the engine, followed by a serial number.

They must always be quoted in any requests for spare parts.

#### ACCESSORIES

The vehicle can be equipped with useful accessories, such as a spare wheel (with bearing bracket attachable to the frame), a windshield etc. For their application, please contact your PIAGGIO dealer.

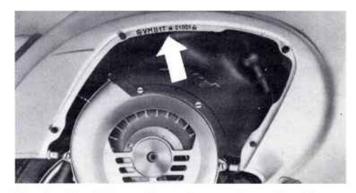


Fig. 3 - Serial number stamped on the frame



Fig. 4 - Serial number stamped on the engine

### operating instructions

Before starting up the vehicle, check:

- 1) Whether the fuel tank is refilled.
- The oil level in the gearbox: unscrew the cap bearing the words "OLIO" (fig. 11) and, with the scooter upright, check the oil is level with the hole.

#### TIRE PRESSURE

Front wheel: 1.25 atm. (18.5 psi);

Rear wheel: 1.6 atm. (23.5 psi) with only the rider, or 2.5 atm. (36.5 psi) with two people

#### **FUEL MIXTURE**

Refuel with a 2% mixture of Esso Mix oil to petrol. (Esso 2T Motor Oil, grade SAE 40: 20 ml. per 1 lt. of normal petrol).

# ACCESS TO THE FUEL TANK AND TOOL BOX

To access the fuel tank cap and tool box, tip the seat forward, having released the rear mounting catch indicated by the arrow in Fig. 5.

N. B. - For the proper functioning of fuel supply, keep the fuel cap vent clear

N. B. - For the proper functioning of fuel supply, keep the fuel cap vent clear.

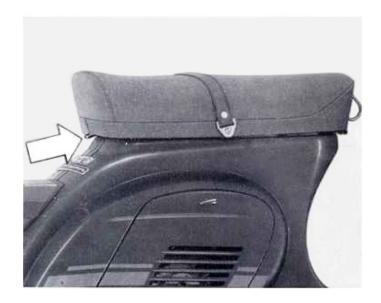


Fig. 5 - Tilting seat for access to the fuel cap, and tool box.

#### ANTI-THEFT STEERING LOCK

Locking handlebar: turn the handlebar to the left (to the stop), turn the key and

press it forward so that the bolt of the lock pushes against the appropriate slot on the steering column. To facilitate the action of the bolt, move the handlebar, rotating it slightly from the end position to the right. With the handlebar locked, let the key return to its original position and remove it.

Unlocking handlebar: insert the key into the lock, turn it to the left and pull it back.

Then return the handlebar to its original position.

WARNING - The anti-theft lock must never be lubricated.

#### TOOL BOX LOCK

side of the vehicle).

The key for the steering lock also operates the tool box lock (on the left

N. B. - the toolbox also contains the ignition electronic control unit

#### **RUNNING-IN**

Distance travelled	Speed that should not be exceeded during running-in.				
Distance travelled	1st gear	2nd gear	3rd gear	4th gear	
First 600 miles (1000 km)	Mph KM/h 15 25	Mph KM/h 24 38	Mph KM/h 32 52	Mph KM/h 43 70	

During the first 600 miles (1000 km) do change the oil in the gearbox (see Fig. 11 and specifications p. 22) and make sure

change the oil in the gearbox (see Fig. 11 and specifications p. 22) and make sure all nuts and bolts are tight: particularly the puts holding the wheels

After the first 600 miles (1000 km) the nuts holding the wheels.

# CONTROL DEVICES LIGHTING AND SIGNALLING

The vehicle is equipped with:

Main switch "B"

Key to enable engine running (position 1) and to stop the engine ("0" position, remove the key) located in the center of the handlebar (see fig. 6).

N. B. - This also functions as an antitheft device because with the switch "B" in position by "0", the kickstarter will not the start the engine.

#### - Switch "C"

Located on the right side of the handlebars, equipped with lever "D" for headlight beam (high - low) and a horn button "E" (see fig. 6).

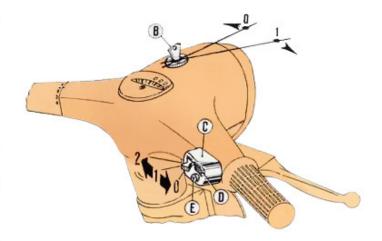


Figure 6 - positions of switches "B" and "C".

"B" - 0 = Engine off (key can be removed) 1 = Ready to start engine.

"C" - 0 = lights off

1 = front marker light and tail light on

2 = headlight, front marker light and tail light on.

D: headlight beam lever (high - low)

E: Horn button.

#### **ELECTRICAL SYSTEM**

The electricity for the lighting and signaling devices is generated in AC by a flywheel with 6 poles (rated voltage 6V). See the wiring diagram in fig. 7.

The vehicle is equipped with the following lighting and signaling devices:

Headlight, circular Ø 115, equipped with a two filament 6V bulb of 25/25 W (high and low beam), and a 6V lamp - 5W for the front

marker lamp. A 6V - 0.6W bulb illuminates the speedometer.

**Taillight**, with lamp 5 W (red light position and number plate light) and 10 W (red light stop).

**Key switch** (removable) installed in the center of the handlebar (see fig. 6).

**Switch** to operate the vehicle lights mounted on the handlebar right side (see Fig. 6).

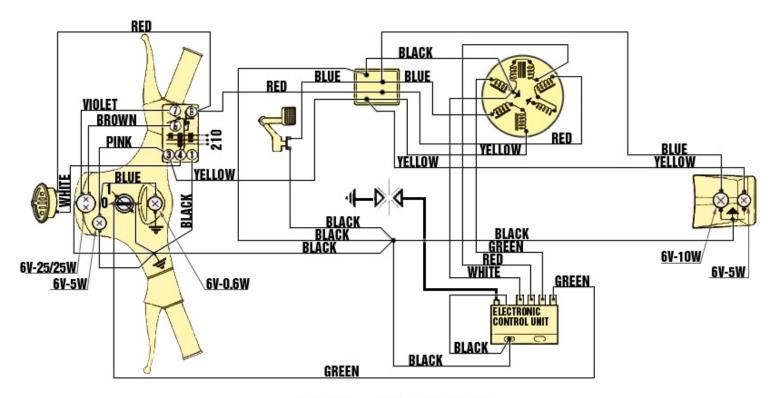


Figure 7 - Wiring diagram

N. B. In any intervention to the system, make sure the connections are correct, paying particular attention to the colors of the conductors marked on the electronic control unit.

#### STARTING

Carry out the operations shown in fig. 8. Do not use the choke with a warm engine; when the engine has started return the choke lever to its normal position.

WARNING - If you have any difficulty in starting see p. 20.

Should it be necessary to recourse to push starting (as described on page 20.) you must first turn the ignition key switch ("B". Fig. 6) to position 1 (ready to start).

#### SETTING OFF

With the engine idling, pull the clutch lever and turn the knob of the transmission into 1.a speed (Fig. 8). To launch the vehicle, gently let the clutch lever and open the throttle (on the right handlebar grip)

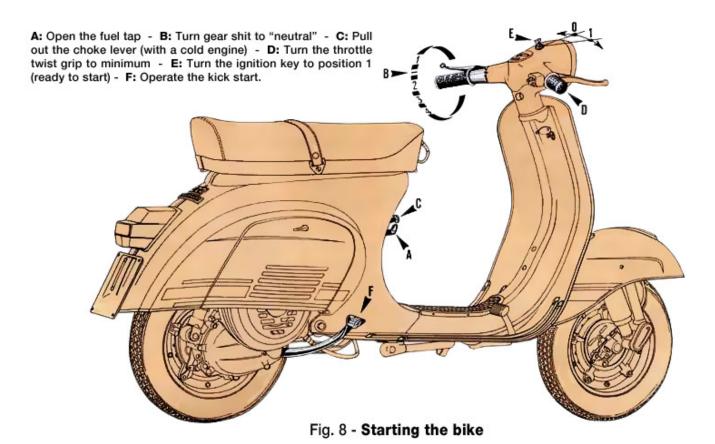
#### CHANGE SPEED

Close the throttle, pull in the clutch lever and turn the twist grip to change to the position of a higher or lower gear (fig. 8).

N. B. - Remember that when you have to reduce your speed do not linger in passing the lower gears.

#### ENGINE STOP

Before stopping the engine, move the gear lever to "neutral" position, then turn the ignition key "B" to position "0" (engine stop) (see Fig. 6), then you can remove the key.



#### maintenance

#### CARBURETTOR ADJUSTMENTS

To adjust the idle speed, tighten or loosen the screw no. 2 of fig. 9 (screw marked with the letter "A" in Fig. 12).

On the body of the carburettor is located the screw adjuster to adjust the slack on the throttle control cable ("B" in Fig. 12): perform the adjustment only when necessary or after removing and replacing.

On the carburettor there is also a screw with a spring that adjusts the idle air mixture (Fig. 9. N. 3 and fig. 12 "C").

In order not to affect the operation of the engine at low speeds, it is not advisable for the customer to modify the position of

this screw; if necessary refer to a PIAGGIO Dealer.

#### STARTING

(In the event of a flooded engine)

In the event of starting difficulties due to flooding the engine (the presence in the cylinder of unvapourised fuel mixture) starting may be achieved with one of the following methods:

– Push-starting: engage second gear, turn the ignition switch to position 1, engage the clutch and push the vehicle. At a certain speed, quickly release the clutch lever and re-engage it when the engine is started.

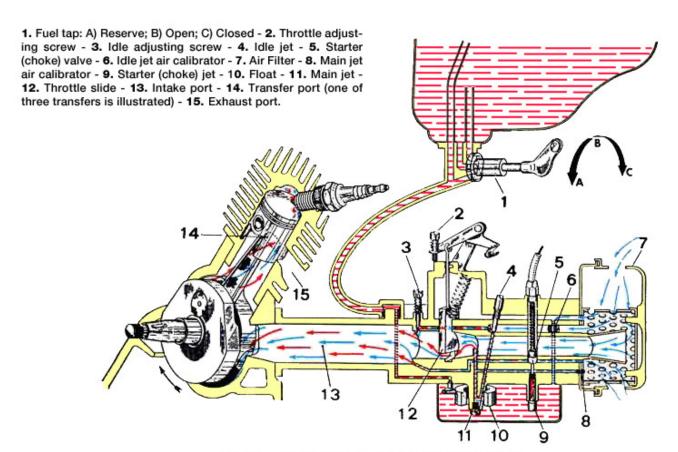


Fig. 9 - Fuel supply and distribution diagram

 Close the fuel tap ("A" Fig. 8), remove the spark plug (see operations on page. 22 and fig. 10) and clean it, rotate the engine a few turns by operating the kick start pedal.

Then screw in the spark plug by hand and lock it securely with the box spanner, turn on the fuel tap and (with key switch in position 1) operate the kick start pedal.

#### REMOVING THE SPARK PLUG

Remove the engine hatch. by rotating (counterclockwise) the closing lever (fig. 2, no. 15) and pulling it outwards; unplug the HT lead from the spark plug and unscrew the spark plug with the box spanner (fig. 10).

N. B. - When refitting, tighten the spark plug by hand, inserting at the correct angle;

Use the box spanner only for securing it tightly.

#### REPLACING THE GEARBOX OIL

Drain the crankcase through the drain hole (see fig. 11).

Introduce a little fresh oil to flush the engine, run the engine for a few seconds and drain the crankcase again.

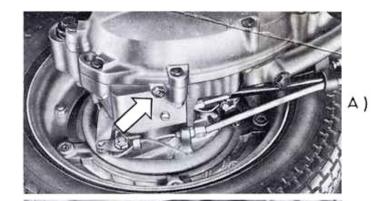
Refill the crankcase though the filling hole with approx 250 g. of fresh oil (until it is level with the hole).

#### REMOVING THE AIR FILTER TO CLEAN

Tip up the seat (fig. 5), remove the toolbox, unhook the eyelet of the choke control cable ("D" in Fig. 12) and remove the rod from the fuel tap (in fig. 12 the visible stem is "E"), unscrew the wing-nuts securing the



Fig. 10 - Removing spark plug



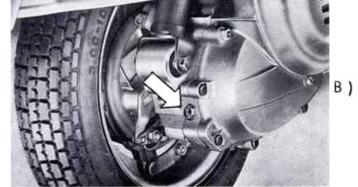


Fig. 11 - Gearbox oil drain hole "A" and fill hole "B"

air filter ("F" in fig.12) and remove it.

## REMOVING THE ENGINE COWL AND CYLINDER HEAD

Remove the carburettor, the exhaust silencer (fig. 15), the rear wheel (fig. 15), loosen the bolt on the motor arm (no. 9. fig. 1), unhook the rear shock and rotate the engine down to remove the engine cowl

WARNING - in relation to the operations necessary for disassembly described above, we recommend contacting a PIAGGIO dealer.

#### **GEARBOX WHEELS AND TYRES**

To remove the wheels. Remove the wheel nuts securing the rims to the drums (fig. 13). When reassembling, tighten wheel nuts alternately (diagonally) and progressively.

#### **IMPORTANT**

To remove the rear wheel (nuts "C", fig. 15) you must first rotate the exhaust downwards by removing the upper fixings "A" on the silencer (13 mm. socket spanner) And loosen the attachment "B" from the crossmember (see fig. 15).

If you need to remove the tyre, first deflate it, and separate the rim halves by unbolting the nuts that connect them (fig. 16).

N. B. - The wheels are interchangeable; you must adjust the tyre pressures to comply with the instructions on page 12.

#### ADJUSTING THE BRAKES

Use the adjusters shown in fig. 14 so that with the brake controls in the resting position the wheel is free to rotate completely.

N. B. - Braking action should begin as soon as you operate the brake controls.

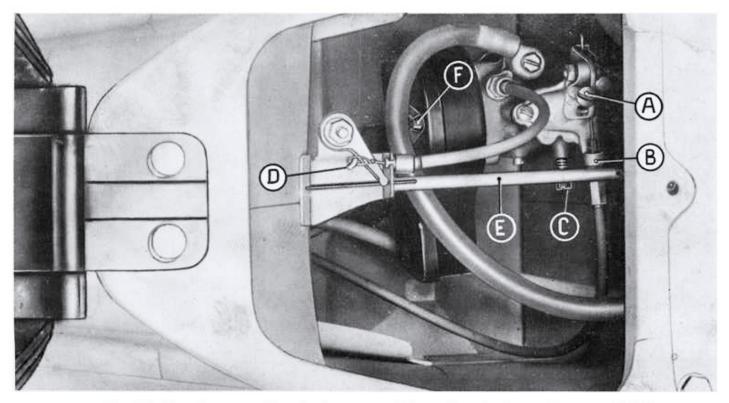


Fig. 12 - How to access the air cleaner and the carburetor (see notes on p. 20-22)

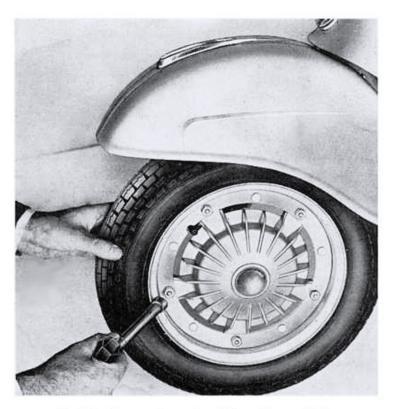


Fig. 13 - Removing wheel from the vehicle

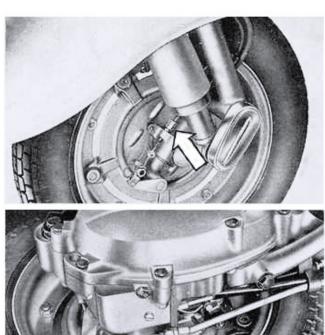


Fig. 14 - Adjusting the brakes

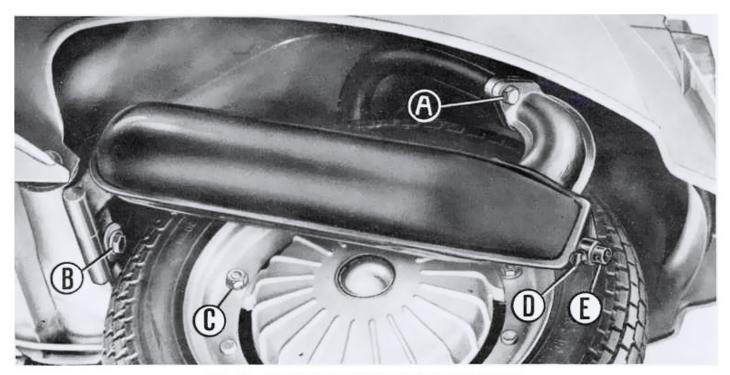


Fig. 15 - Removing rear wheel from the vehicle

N. B. - To rotate the silencer remove fixings "A" and loosen "B".

WARNING - To extract pipe "E" on the silencer (locking screw "D") see p. 30 for instructions for exhaust de-carbonising.



Fig. 16 - Removing the tyre

# CHECKING AND SETTING THE IGNITION TIMING

Since, as already described on p. 10, no mechanical parts subject to wear exist in this type of ignition, the timing remains virtually unchanged over time.

Should it be necessary to remove the stator plate (for possible replacement) it is important when reassembling, in order to ensure the correct ignition timing, that the notch located on the stator plate is perfectly aligned with the corresponding notch formed on the crankcase (as indicated by the arrow in fig. 17).

WARNING - If, after having proceeded as described above, the engine does not run correctly (with symptoms attributable to the ignition timing), it is necessary to check the electronic

ignition timing.

The timing is correct when the spark fires at the same time as the white line on the pick-up "P" (fig. 17) is aligned between the two lines marked on the edge of the slot in the rotor (visible by removing the rubber bung).

To perform this check (which requires the use of special tools, timing light etc..) it is essential to contact your PIAGGIO dealer.

#### REPLACING BULBS

If the headlamp bulb fails, before replacing it, make sure that the rear lamp and number plate lamp have not also failed, and vice versa.

N. B. - Before switching on the new lamps ensure that they make efficient electrical contact with the bulb holder.

#### **HEADLAMP ADJUSTMENT**

The correct orientation of the beam can be achieved by adjusting the screw that holds

the lamp in place and moving the lamp unit. Before carrying out the headlamp alignment operation in fig. 18, make sure that the tyres are inflated to 1.25 atm. (18.5 psi) (front) and 2.5 atm. (36.5 psi) (rear).

Start the engine and hold the throttle at about 1/3 of its travel and turn on the headlamp, set to main beam: with two people on board, slacken the adjusting screw and slide the adjuster until the the brightest point of the headlamp beam lines up with the "0" axis point of the screen.

WARNING - The headlamp adjustment may also be carried out with only one person on the saddle. In this case, however, if the vehicle were to be used with two people, it would be necessary to recheck the alignment.

#### PERIODIC MAINTENANCE

Although the electronic ignition ensures

smooth operation of the engine with the spark plug fouled or spark electrodes that are not perfectly gapped, if you notice defects immediately **check** the **spark plug**: clean the electrodes with pure petrol and a wire brush (or emery cloth) and set the spark plug electrode gap to 0.6 mm. If you have cracks or breaks in the insulation, replace the spark plug. You should not change from the type mounted by the factory.

### **EVERY 2400 miles (4000 Km)**

- 1) Check the oil level in the gearbox.
- Remove (by turning the screw "D") the exhaust tube "E" on the silencer (fig. 15) and de-carbonise it.

N. B. - If the exhaust tube "E" is difficult to remove (due to excessive fouling), you must insert a pin

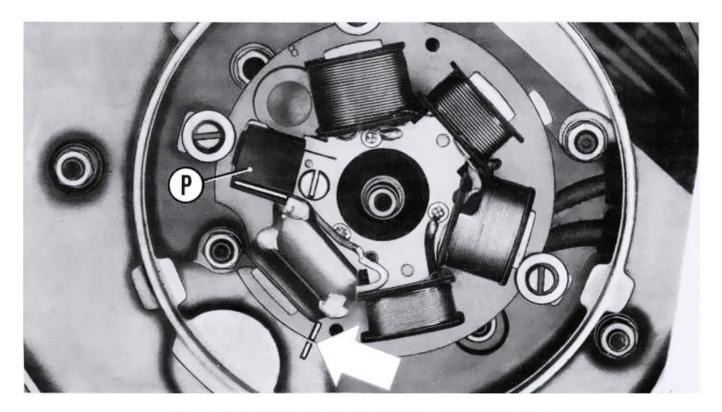


Fig. 17 - Operations for setting electronic ignition timing

through the hole in the end of the tube, to free it up via rotation or axial movement.

- 3) De-carbonise the engine (see page 24): the cylinder head, the piston crown and the cylinder ports, making sure that no residual carbon deposits remain inside the cylinder.
- Lubricate the brake lever fulcrum points and the gear twist-grip.
- 5) Remove the air filter (see page 22) and clean it, agitating it in a bath of neat petrol; if possible dry it with a blast of compressed air.
- 6) Clean and grease the nipple on the front suspension (second detail from the left, fig. 19); remove the rubber stopper on the front suspension and fill the housing behind it with grease.

#### EVERY 8000 Km

- 1) Replace the transmission oil (page 22).
- Lubricate the flexible control cables.
- In case of irregularities or decreased engine performance please consult your local PIAGGIO dealer.

#### LAYING-UP

We recommend that you do the following:

- 1) General cleaning of the vehicle.
- 2) When the engine is off and the piston at bottom dead center, **remove the spark plug**, and through its hole introduce 10 15 cc. of **Esso 2T Motor Oil** or **Esso 30 Motor Oil**. Then operate the kick-start lever 3 4 times.
- Remove the fuel from the vehicle: spread antirust grease on all the unpainted

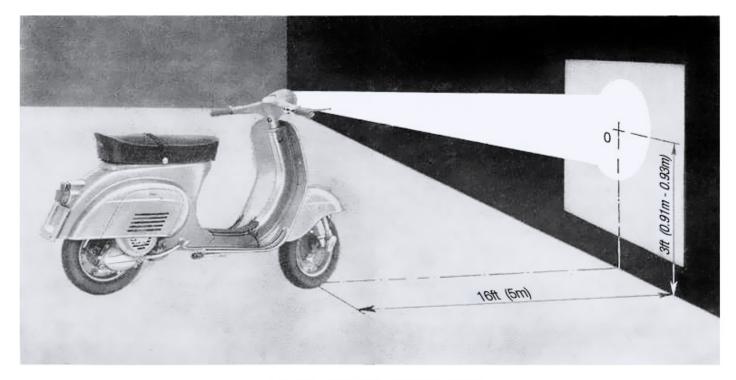


Fig. 18 - Aligning the headlamp

N. B. - The point "0" is valid for setting alignment with one or two persons on the motorcycle.

### Tables for lubrication and periodic maintenance

#### PRINCIPAL OPERATIONS TO BE CARRIED OUT

EVERY 2400 mls Cleaning silencer, cylinder head, piston, and spark plug (and adjusting plug gap)

(4000 km) Gearbox (top up oil level).

Esso Motor Oil 30

Front suspension - Brake levers - Speedometer drive housing - Gear selector (greasing)

Esso Beacon 3

EVERY 4800 mls Cleaning the air filter (in petrol).

(8000 km) Gearbox (change the oil).

Esso Motor Oil 30

Flexible control cables (greasing)

Esso Beacon 3

Engine: at each refueling (lubrication effected by the oil in the fuel Esso Mix at 2% mixture (20 ml mixture).

Esso 2T Motor Oil for 1litre of Petrol).

Front and rear suspension dampers (only if defective). \*

Esso LP 458

Consult vour PIAGGIO dealer.

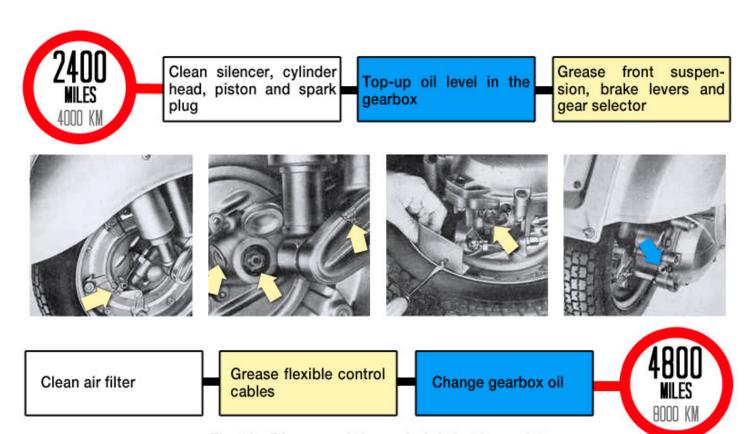


Fig. 19 - Diagram of the main lubrication points

metal parts; keep the wheels lifted off the ground by placing the platform on two blocks of wood.

#### CLEANING THE VEHICLE

For the exterior of the engine use paraffin (use a brush and clean rags to dry). Wash the painted parts with water instead, as indicated in the following paragraph, using a sponge, and a chamois leather to dry.

#### WASHING THE BODY

To soften dirt and mud deposited on the painted surfaces, use a jet of water at low pressure. Once softened, mud and dirt must be removed with a soft car sponge impregnated with a lot of water and automotive shampoo (there are many shampoos on the market, such as

Rolene and Teepol, which are used in aqueous solution at 3 - 5% by weight). Then you rinse with plenty of clean water.

At the end of the cleaning process use the surface of chamois leather to wipe the body clean and to prevent water marks from forming on the paintwork.

Stains: Washing alone can not remove tar stains, grease, oil, insects etc. Instead you should remove these stains as soon as possible, because they can corrode the paint.

After washing and drying the body as above, any tar spots, grease, oil, etc. remaining on the paintwork can be removed by using a soft cotton cloth or tissue moistened in paraffin or turpentine and rub gently over the stain until it

has been destroyed.

Areas so treated should then be rinsed immediately with plenty of water.

Insects squashed in large quantities on the wings, legshield, headlamp etc., if dried, cannot be removed with plain water, but instead require a mild solution of lukewarm water and shampoo.

**Polishing:** If the treatments detailed above do not restore the paint finish to its original brilliance or if the painted surface, as a result of insufficient care, has faded due to the effects of sun, dust or rain, polishing will be necessary.

You can use any commercially available polish or similar preparation, provided it is of good quality.

Work the polish in by soaking it into a soft clean cloth or wadding and lightly rubbing the surface evenly with a non-circular reciprocating motion. It should be noted that polishing must always be preceded by washing.

WARNING - washing and polishing must never be performed in the sun, especially in the summer when the body is still warm. Never use petrol or oil soaked rags for washing painted surfaces or plastic, to avoid the loss of their shine.

## fault finding

In the event that despite having implemented the suggested remedies the problem persists, please contact your PIAGGIO dealer.

If the vehicle does not run, identify the problem and attempt to rectify as detailed below:

#### DIFFICULTY STARTING

Fuel system - carburettor - ignition.

No fuel mixture in the tank:

Switch to reserve and refuel as soon as possible.

Ignition key switch in position "0"

Turn the igniton key to position "1".

Filter, jets, or carburettor body clogged or dirty:

Remove and wash in petrol, dry with a jet of compressed air.

Choke lever is in the "closed" position: Pull it out to the right position.

Spark plug porcelain insulation broken:

Check the spark plug and replace it.

Failure of the generator device:

Pull off the spark plug wire and check (with the ignition key in position 1) if operating the kick start lever causes the wire to spark between the end of the cable and ground. (Check with your Authorized Workshops for possible repairs).

Engine flooded:

See p. 20.

#### POOR RUNNING

1. - Poor compression:

Check the attachment of the spark plug and the head.

2. - High consumption and poor performance:
Choke lever is in its closed position or blocked:
Release the choke lever and lubricate it.

Air filter clogged or dirty:

Wash with pure petrol and dry with a jet of compressed air

3. - Defective electrical system

Cable terminals detached or poorly connected:

Reconnect properly.

Incorrect headlamp alignment:

Adjust correctly (see page 29).

Bulb failure:

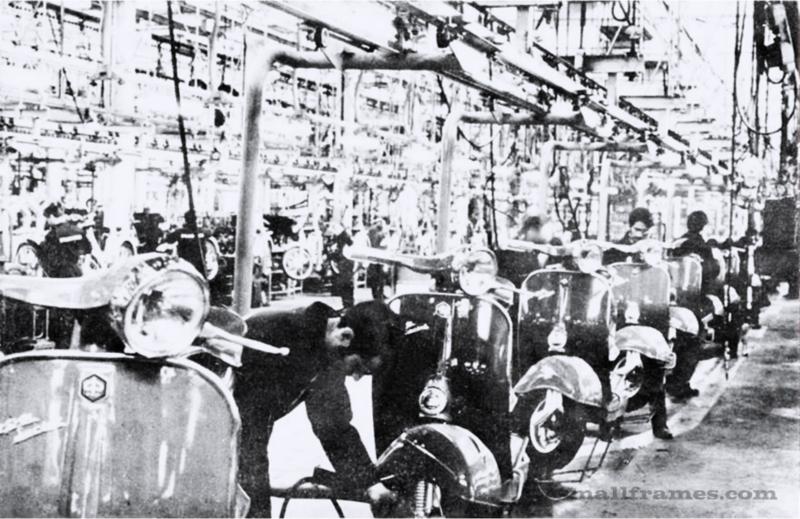
See page 29 for instructions on replacement.

Other causes:

Consult your PIAGGIO dealer.

The descriptions and illustrations given in this publication are not legally binding. PIAGGIO therefore reserves the right, without prejudice to the essential characteristics of the type described and illustrated, to introduce at any time, without being required immediately to update this publication, any changes to components, parts or accessories, which it considers necessary for the purpose of improvement or to meet any manufacturing or commercial requirements.

PIAGGIO & Co. - S.p.A. - PONTEDERA - S.A.T. - Technical Publications Office - Des. No. 170831/7705



In this department the final assembly of Vespa Primavera "ET3" is carried out.

All parts that are used for the assembly of the products also constitute the spare parts that PIAGGIO provides for every vehicle.

Original PIAGGIO spares always maintain your Vespa Primavera as new.





## **PIAGGIO**

## Genova

Piaggio produces: Vespa motor scooters - Ciao, Bravo and Boxer mopeds - Ape vans - Hydrojet Piaggio - Berkeley hydropropulsion units - Gilera motorcycles. Factories in Pontedera, Pisa and Arcore. Head office in Genova, Via Antonio Cecchi, 6