



# **Caspa** **-125**

**152 L2 MODEL**

**OPERATION AND MAINTENANCE**

2

$$\frac{1}{2} \left( \frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

... ..  
... ..



# *Cessna* 125

152 L2 MODEL

OPERATION AND MAINTENANCE



## INTRODUCTORY NOTE

*In accordance with the Douglas policy of progressive improvement, the right is reserved to alter any details of price, specification, accessories, and equipment, without notice, and without incurring any obligation.*

BE *Vespa* - WISE

To keep your Vespa in perfect running order, it is advisable to entrust repairs only to authorised Douglas Dealers. We point out that the use of parts other than original "Douglas" Spares will invalidate your Guarantee.

Special care should be taken to ensure that the oil/petrol ratio is always in strict accordance with our recommendations.

**DOUGLAS (SALES & SERVICE) LTD., KINGSWOOD, BRISTOL.**

Telephone 67-1881/9

Directors: J. W. G. Kershaw (Chairman). C. McCormack (Managing) J. Griffith Hall. N. G. Cadman. H. J. Willis. H. R. Balnes.



Fig. 1. Vespa 125.



Fig. 2. Vespa controls.

1. Gear change twistgrip with clutch control lever. 2. Front brake lever. 3. Throttle control grip. 4. Light and dip switch. 5. Front brake jaws. 6. Rear brake pedal. 7. Kickstarter. 8. Gear shifter. 9. Rear brake jaws. 10. Clutch. 11. Carburettor, air cleaner. 12. Choke control lever. 13. Fuel tap.

## IDENTIFICATION DATA

Serial numbers with prefixes are stamped on both engine and frame, in the position indicated on Fig. 3.

Such numbers and prefixes identify the Vespa as prescribed by law and are repeated on the test card and other documents of the scooter.

They must be quoted when ordering spares.

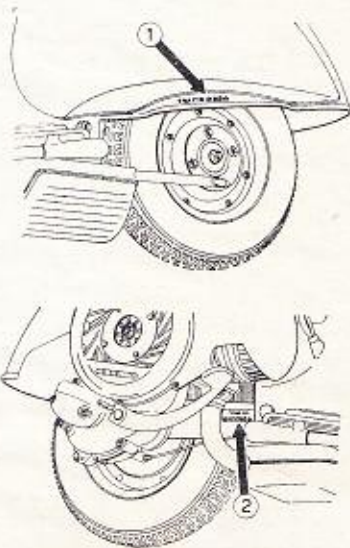


Fig. 3. Stamping on frame (1) and engine (2).



## TECHNICAL DATA

<b>Fuel consumption at economic speed</b>		<b>Wheel base</b>	46.4"
Up to 120 miles per imp. gal.		<b>Handlebars width</b>	25.7"
<b>Max. speed</b>	46.5 m.p.h.	<b>Scooter length</b>	68.3"
<b>Carrying capacity</b>	2 persons and 22 lbs. of luggage	<b>Max. height</b>	38.7"
<b>Range</b>	Up to 200 miles	<b>Min. height of floorboard</b>	8"
		<b>Min. turning circle</b>	59"
		<b>Weight (with fuel)</b>	192 lbs.

### ENGINE

Single horizontal cylinder, two-stroke, with reverse flow scavenge and deflector piston.

**Bore** . . . . . 54mm 2.126"

**Stroke** . . . . . 54mm 2.126"

**Displacement** . . . 123.67 cc. 7.48 cu. in.

**Compression ratio** . . . . . 6.3 to 1

The engine is pivoted to the chassis of scooter

through the cylindric arm of the crankcase half, clutch side, provided with a spindle and two bushes (see Fig. 4).

Its vibrations are damped by the rear suspension with variable rate coil spring and hydraulic damper (see also page 13).

The rear wheel is secured to the end of mainshaft.



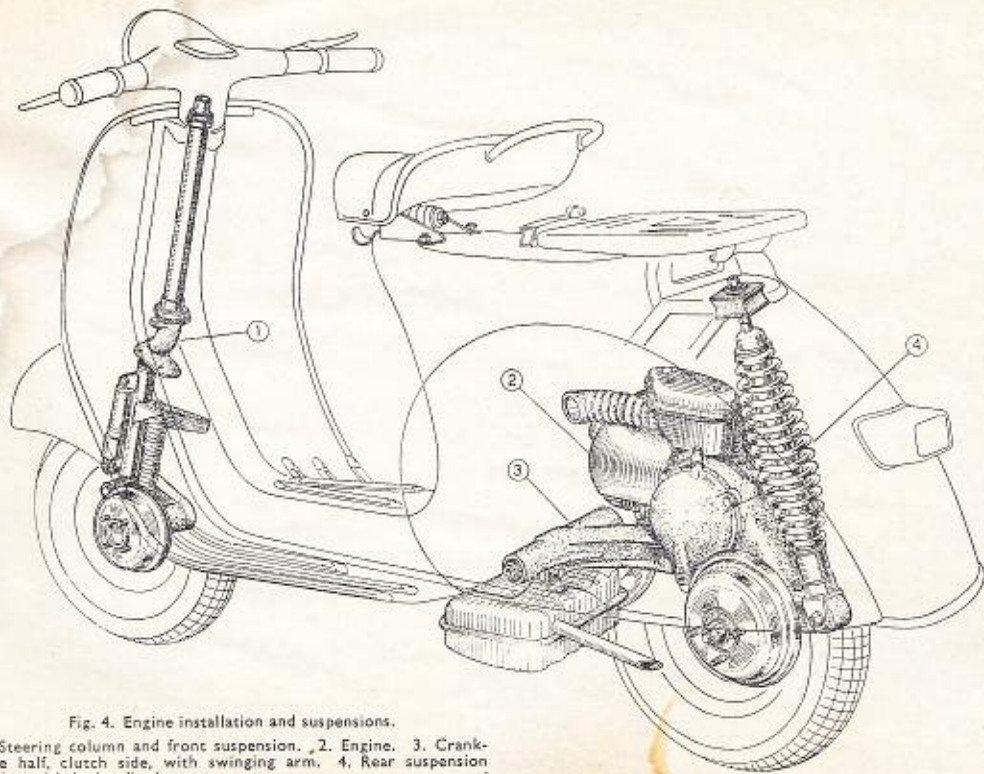


Fig. 4. Engine installation and suspensions.

1. Steering column and front suspension. 2. Engine. 3. Crankcase half, clutch side, with swinging arm. 4. Rear suspension spring with hydraulic damper.

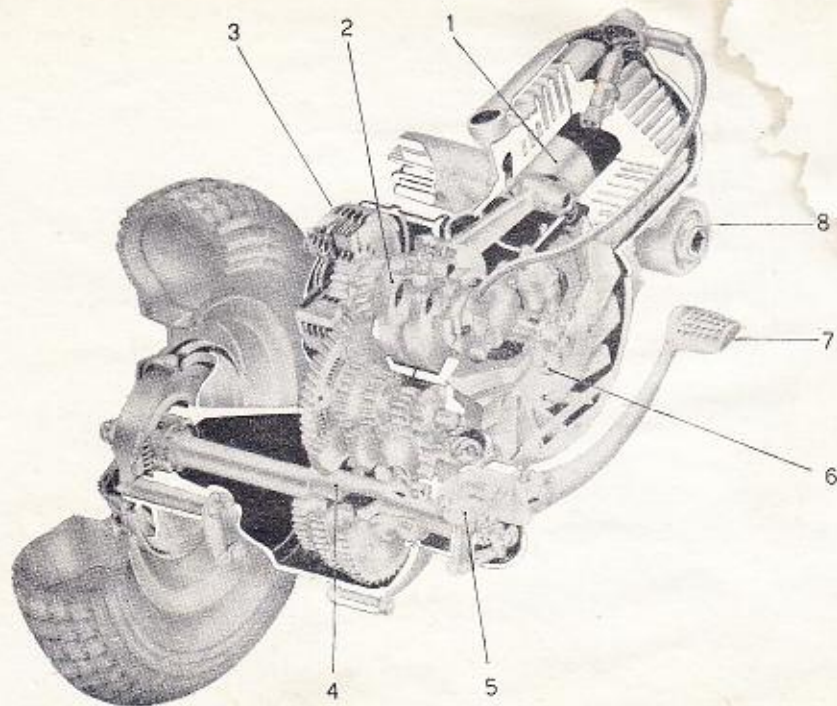


Fig. 5. Section of engine.

1. Piston. 2. Crankshaft. 3. Clutch. 4. Mainshaft. 5. Gear shifter. 6. Flywheel magneto. 7. Kickstarter.  
8. Crankcase half, clutch side, with swinging arm.

**Ignition** by a high tension coil in the fly-wheel magneto (see Fig. 6).

Sparkplug: either AC 45 F, KLG F 70, Lodge HN, or Champion L 86.

Ignition timing with spark advance of  $28 \pm 1^\circ$ .

**Lubrication** by oil in the fuel mixture for piston, cylinder, gudgeon pin, con. rod, crankshaft, main bearings.

Both clutch and gear box operate in oil bath.

**Feeding.** Fuel feed to the carburettor is provided for by gravity (see Fig. 7) with petrol mixture.

Carburettor with float-chamber. Fuel tank with total capacity of 1.7 imp. gals. and emergency reserve.

Three-way tap ("on" - "off" - "reserve").

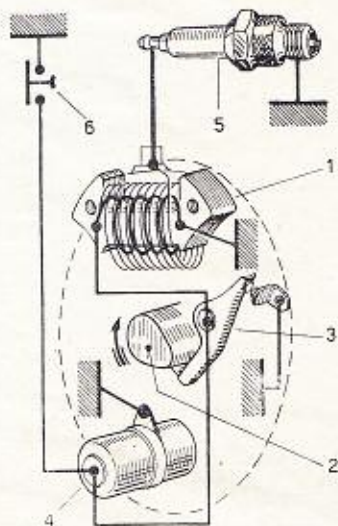


Fig. 6. Ignition diagram.

1. Ignition coil in flywheel magneto. 2. Rotor cam. 3. Breaker. 4. Condenser. 5. Sparkplug. 6. Engine cut-out on switch.

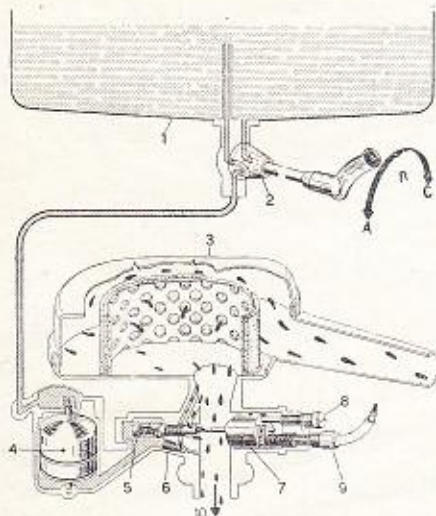


Fig. 7. Feeding circuit.

1. Fuel tank. 2. Fuel cock lever: (A) Reserve, (B) Open, (C) Closed. 3. Air cleaner. 4. Float. 5. Maximum jet. 6. Idling jet. 7. Throttle slide. 8. Idling adjuster. 9. Adjuster on throttle control cable. 10. To the cylinder.

**Transmission.** The engine (see Fig. 5) drives directly the rear wheel through clutch, cush drive and gear box.

**Clutch.** Multiplate, with facings of cork composition applied to the driven discs. Control by lever, on left hand side of handlebars (see Fig. 2), and adjustable cable.

**Gear box.** 3 speed drive with mesh gears in oil bath.

Its adjustable twistgrip control is coupled with that of the clutch, on left hand side of handlebars (see Fig. 5).

Engine to wheel transmission ratios:

First:	12.2 to 1
Second:	7.6 to 1
Third:	4.85 to 1

**Starting** by means of kickstarter, right hand side of scooter (see Fig. 5).

The multiple gear and, consequently, the



engine are set in motion through a ratchet sector and a gear by operating the kick-starter.

**Cooling** effected at all speeds by centrifugal fan (see Fig. 8).

**Air cleaner** mounted on the engine. Air goes to the carburettor through a large cone-shaped inlet tube and a silencing chamber with filter moistened by fuel mixture, which prevents dust and dirt from passing into carburettor.

**Silencer.** Expansion and absorption combined type.

Particular attention has been given to the design of the silencer and air filter in accordance with Ministry of Transport requests to reduce the noise level to an absolute minimum. We recommend that these parts are maintained in good condition.

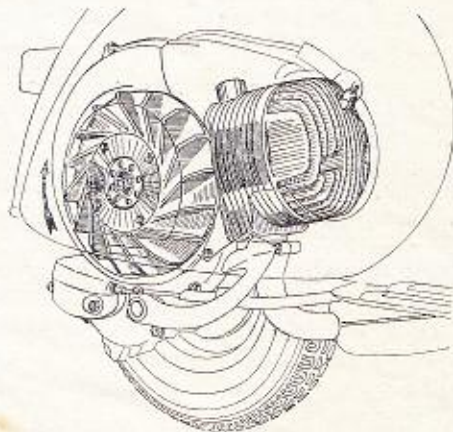


Fig. 8. Cooling system.

## FRAME

**Stressed skin body** of pressed sheet, with streamlined, monocoque, type structure (see Fig. 1). It gives full protection to the driver, to the passenger and to the machine units; it is completed in this function by the mud-guard and, on the two sides, by the steel sheet engine bonnet and tool box.

**Handlebars** consisting of two arms in steel tube, clamped in a support which is fixed to the steering column.

The central part of handlebars is completed with two shells in pressed steel sheet. The head lamp is installed therein. All control cables and electric wires, to be connected to the handlebars, are concealed inside it.

**Steering column, suspension and wheels.** The steering column bears the handlebars, clamped on its top end, and the front wheel swinging hub, pivoted at its bottom end through a stub axle.

Front suspension with coil spring and double action hydraulic damper.

Rear suspension with variable rate coil spring and coaxial, double action hydraulic damper. The 8-0" dia. wheels are interchangeable and have rims of pressed steel sheet.

Tyres of dia. 3.50"—8".

**Saddle** of the nose-pivoted, sprung type with central spring adjustable to the driver's weight. Alternatively, a dual seat.

**Brakes.** Expanding type with cable control. Front: lever on right hand side of handlebars. Rear: control pedal on right hand side of floorboard.

**Central stand.** A two-leg stand, easy to operate, is arranged under the floorboard. A strong return spring holds it in contact with the floorboard and keeps it from vibrating while the scooter is being ridden.

## WIRING

A six pole flywheel magneto (nominal voltage: 6 V) supplies alternating current for feeding head lamp, tail lamp and horn (see Figs. 10 and 11).

The 105 mm dia. **head lamp** installed on the handlebars, is provided with a 25/25 double filament bulb (main and dipped beam) and with a 3W bulb for parking light.

The **tail lamp** with red reflector has a 3W bulb which also illuminates the number plate. The light and dip switch unit with two levers is installed on the right hand side of the handlebars (see Fig. 9); one of the control levers has three positions (head light and tail lamp on - lights off - pilot lamp and tail lamp on); the other one gives the two light conditions of the head lamp (main and dipped beam). The switch has also two push buttons for cut-out and horn respectively.

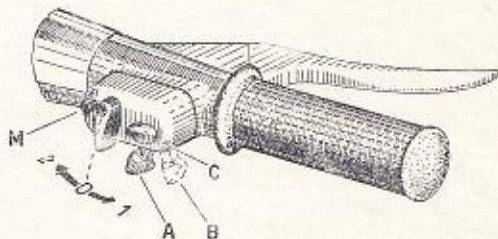


Fig. 9. Light and dip switch.

M: Engine cut-out.  
Switching lever (1): head light and tail lamp on.  
○: lights off. (2): pilot lamp and tail lamp on.  
Dipping lever (A): dipped beam. (B): main beam.  
C: horn button.

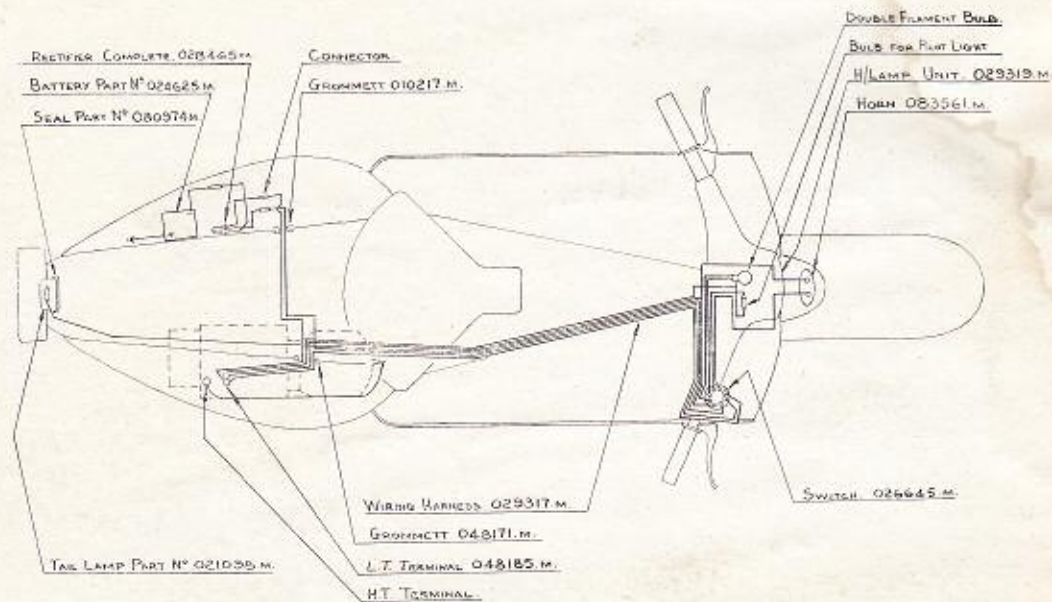


Fig. 10. Cable harness.



### SWITCH POSITIONS

Position 0—No Lights.

Position 1—Contacts 1, 3 (6 or 7) a and b connected A.C. current to H/lamp (main or dipped beams) and Tail light.

Position 2—Contacts 1, 2 and 5 connected D.C. current to Parking and Tail light.

8. H/lamp/parking light to L.T. terminal (White).  
9. L.T. terminal to earth (White.). 10. Engine cut-out (Red) switch contact M to L.T. terminal.  
11. Engine cut-out (Red) L.T. terminal to magnetic coil. 12. D.C. feed (Green) switch contact 2 to battery. 13. D.C. feed (Pink) switch contact 5 to parking light. 14. Tail lamp lead (Black) switch contact 1 to tail light. 15. A.C. feed (Yellow) switch contact 3 to horn. 16. A.C. feed (Yellow) horn to L.T. terminal. 17. A.C. feed (Yellow) L.T. terminal to No. 1 alternator coil. 18. A.C. feed (Yellow) No. 2 alternator to L.T. terminal.  
19. A.C. feed (Yellow) L.T. terminal to rectifier. 20. Horn to horn button (White) switch contact 4. 21. Battery lead to earth. 22. H.T. lead to plug. 23. A.C. feed (Violet) switch contact 7 to H/lamp main beam. 24. A.C. feed (Maroon) switch contact 6 to H/lamp dipped beam.

**THIS IS DIAGRAM  
FOR MACHINES UP TO  
SERIAL NO. 15240. SEE NEXT  
PAGE ABOVE THIS NUMBER  
(Page 16).**

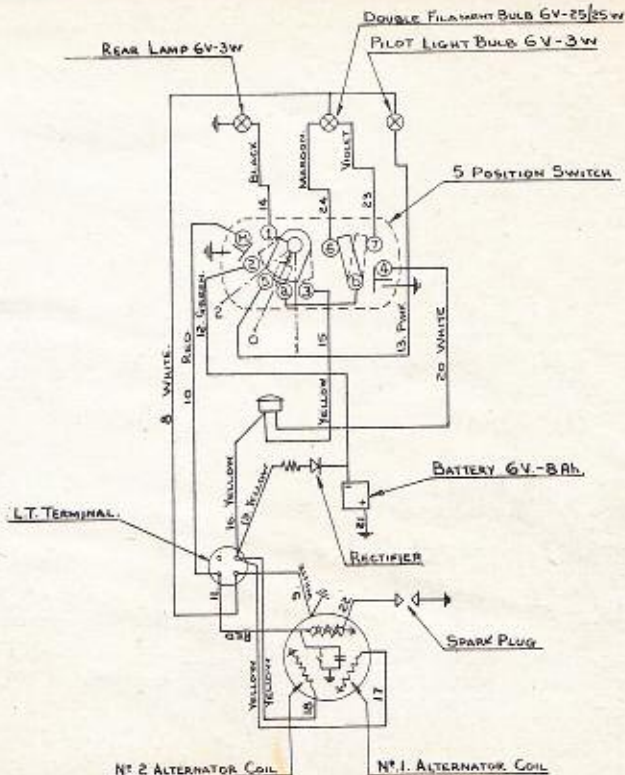


Fig. 11. Connections and electric wiring diagram

# SWITCH POSITIONS

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19. A.C. feed (Green) L.T. terminal to rectifier. 20. Horn to horn button (White) switch contact 4. 21. Battery lead to earth. 22. H.T. lead to plug. 23. A.C. feed (Violet) switch contact 7 to H/lamp main beam. 24. A.C. feed (Maroon) switch contact 6 to H/lamp dipped beam. 25. A.C. feed No. 2 alternator coil to L.T. terminal.

**FOR MACHINES  
SERIAL NO. 15241 ONWARDS.**

**BELOW THIS NUMBER  
SEE PAGE 15.**

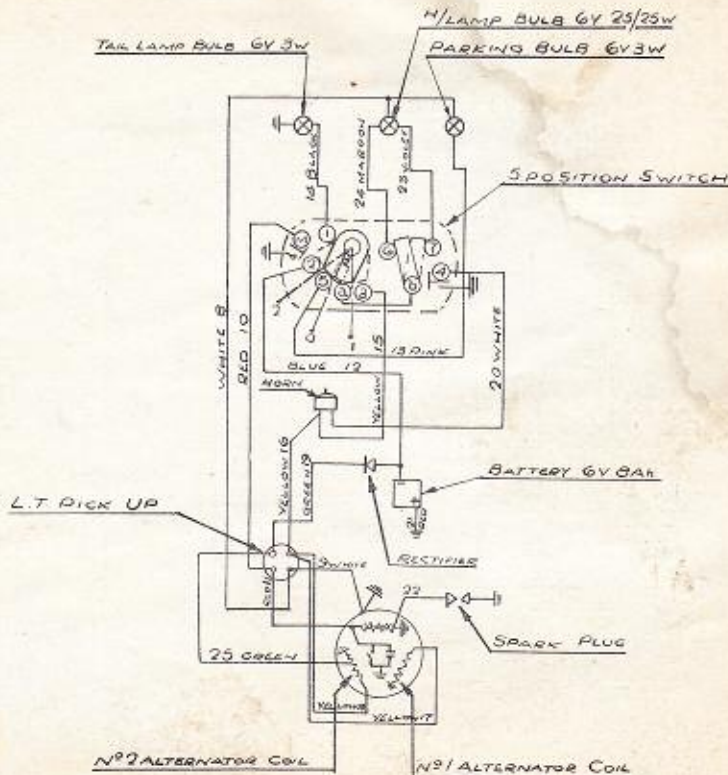


Fig. 11. Connections and electric wiring diagram.

## TOOL KIT

2 double-ended box spanners (11-14 and 21-22 mm); 1 double open-ended spanner (8, 14 mm); 1 single open-ended spanner (7 mm); 1 screwdriver.

These tools are contained in a canvas roll which is placed in the left wing together with this booklet.

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## OPERATION

For **fuel mixture** to be used both during and after running-in, see chart on page 30.

**We recommend to use good quality, standard grade Petrol, and to mix it with oil thoroughly. Keep the breather on filling cap clean.**

**Running-in.** Important rules to be followed while running-in 1200 miles:

— Do not exceed following speeds:

1st gear	9.5 m.p.h.
2nd gear	19 m.p.h.
3rd gear	31 m.p.h.

— Do not hold these max. speeds for long

periods neither use full throttle opening up-hill.

— Change oil in the gear box and check that nuts and bolts are not slack after the first 600 miles.

**Starting the engine.** See on Fig. 7 the three positions of the tap: on, off, reserve.

Open the fuel tap, put the gear box in neutral (see "O", Fig. 13) and the throttle in slow running position, then depress the starting lever.



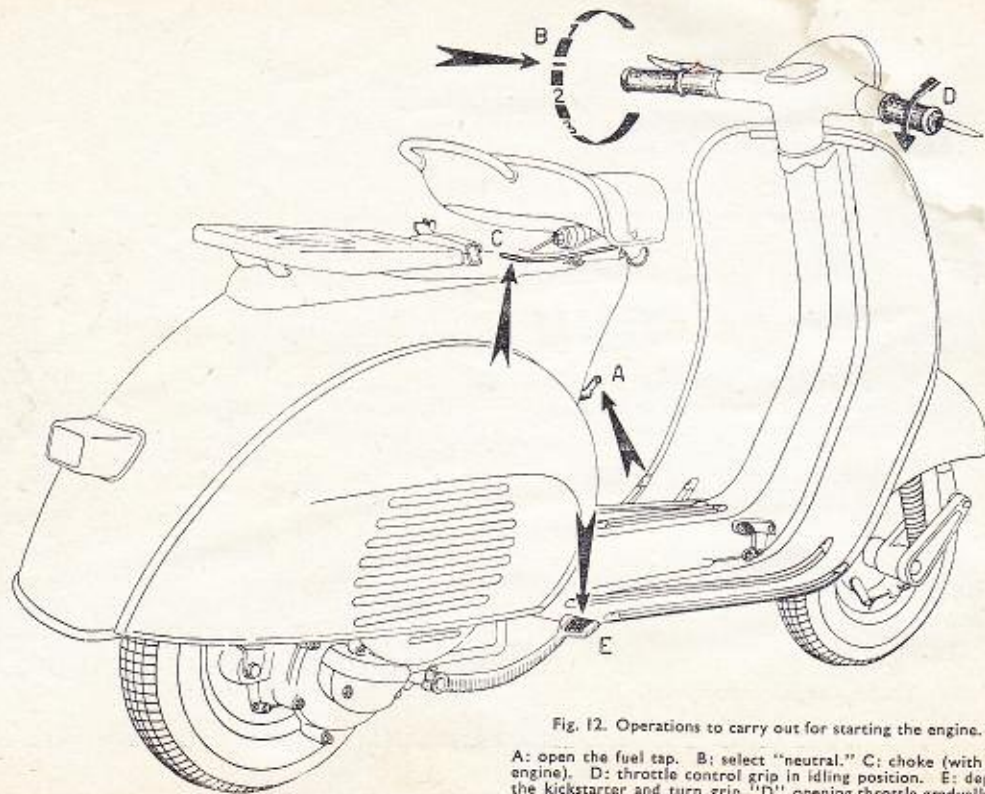


Fig. 12. Operations to carry out for starting the engine.

A: open the fuel tap. B: select "neutral." C: choke (with cold engine). D: throttle control grip in idling position. E: depress the kickstarter and turn grip "D" opening throttle gradually.



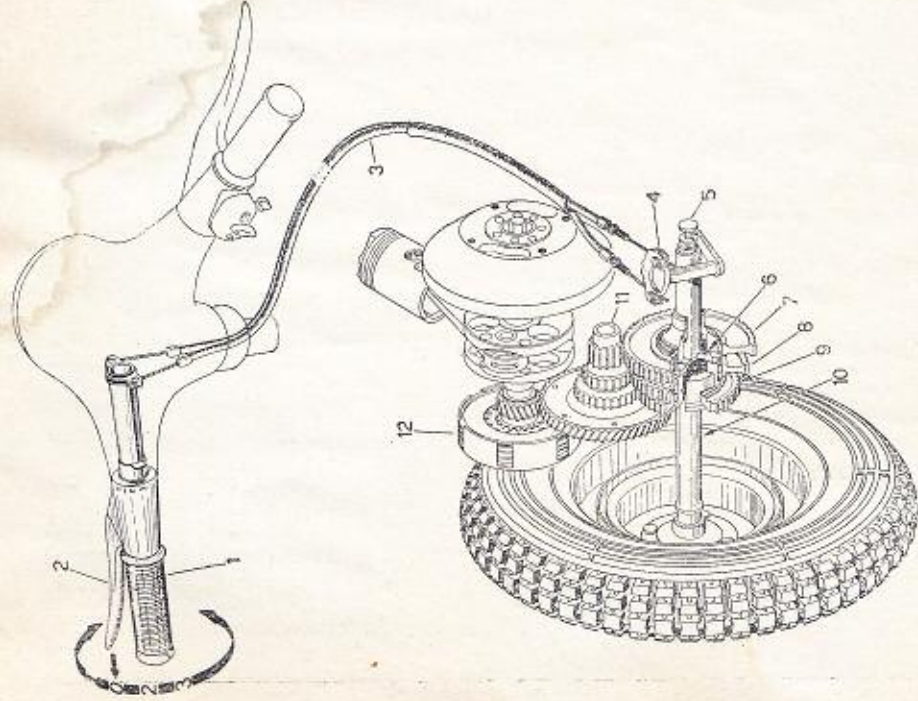


Fig. 13. Drive system.

1. Gear change twistgrip. 2. Clutch control lever. 3. Gear change control cables. 4. Gear shifter. 5. Selector stem. 6. Selector. 7. 1st gear. 8. 2nd gear. 9. 3rd gear. 10. Mainshaft. 11. Cush gear. 12. Clutch.  
N.B. Position 1-2-3 of the gear change twistgrip correspond to 1st, 2nd and 3rd gear respectively; "O" indicates the neutral position

With cold engine, lift the choke rod.

In case of starting troubles due to engine being flooded (unvaporized fuel mixture has reached the cylinder and the combustion becomes therefore very difficult), proceed according to either one of following methods:

— Push-start the scooter; engage second gear, depress the clutch and push the machine to a certain speed; suddenly release the clutch lever and pull it back as soon as the engine fires.

— Close the fuel tap, remove the spark-plug and rotate the engine by means of the kickstarter; wipe the plug dry and screw it back. Open the fuel tap and depress the starting lever.

**Be careful while re-assembling the sparking plug:** start screwing it by hand at the proper angle, and use the box spanner just for the last turns.

**Setting the machine in motion.** Let the engine idle, lift the clutch and turn the gear change twistgrip so that the figure "1" (1st gear) engraved on it coincides with the line engraved on handlebars (see Fig. 13). Now let in the clutch gently, while opening the throttle gradually to set the machine in motion.

**Gear change.** After reaching the required speed in 1st gear, lift the clutch, close quickly the throttle, and turn the gear change twistgrip so that the engraved line is opposite figure "2" (2nd gear); let in the clutch and open the throttle.

Repeat this procedure for changing into 3rd gear and for changing down (see the drive system on Fig. 13).

When you reduce the speed of your machine, change down without delay.

Do not turn the gear change twistgrip while the engine is not running.

As soon as gear change troubles arise, particularly when the control becomes hard, customers should have their machines adjusted by a dealer or authorized service station.

**Slow running adjustment.** No hand tool is required for this job. Idling revs. can be raised or reduced resp. by simply slackening or tightening the screw on carburettor cover.

Near the screw for slow running adjustment there is a screw for adjusting the throttle control cable. It is to be used only if necessary, and while dismantling and re-assembling.

**Stopping the engine.** Close throttle and push the earth button. This will leave the cylinder full of fuel vapours, and the next start will be much easier.

**Tyres.** The wheels are interchangeable, i.e. they can be assembled either in front or rear, provided, of course, that they are inflated to the pressures subsequently prescribed.

When a flat tyre is to be replaced, unscrew the four nuts which secure the wheel to the brake drum, pull the wheel sideways off the studs, repair the tube or fit the spare wheel on.



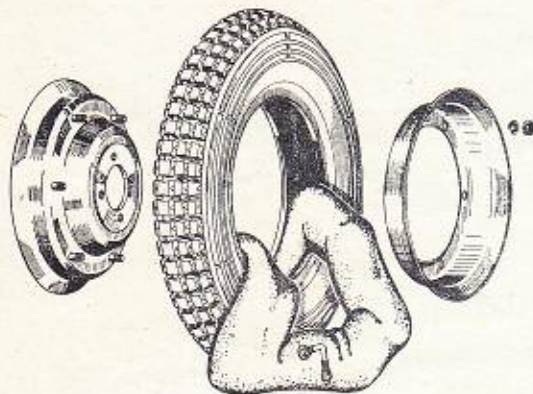


Fig. 14. Removing the inner tube.

Make sure that the spring washers are present when re-assembling the wheel: tighten the nuts diagonally and evenly.

For removing the inner tube, deflate it first, then unscrew the six nuts on the wheel, so that the two halves of the rim will fall apart (see Fig. 14).

Tyre pressures (lbs.) to be:

For **Dunlop**:

Solo: Front 16, Rear 20.  
Pillion: Front 16, Rear 32.  
Sidecar: Front 16, Rear 24, Sidecar 16.

For **Pirelli**:

Solo: Front 16, Rear 22.  
Pillion: Front 16, Rear 32.  
Sidecar: Front 18, Rear 24, Sidecar 16.



**Brake adjustment.** Brakes are properly adjusted if:

- the wheel rotates freely when respective control lever or pedal are in resting position.
- the braking action starts as soon as respective controls are operated.

These conditions are achieved adjusting the cables by means of screws indicated with arrows in Fig. 15.

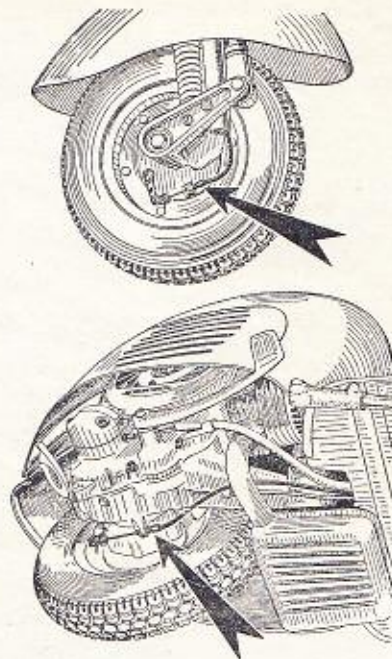


Fig. 15. Brake adjustment.

## MAINTENANCE

**Setting the head lamp.** The correct orientation of the main beam can be obtained on the vertical plane as follows.

Check that both front and rear tyres conform to prescribed pressures.

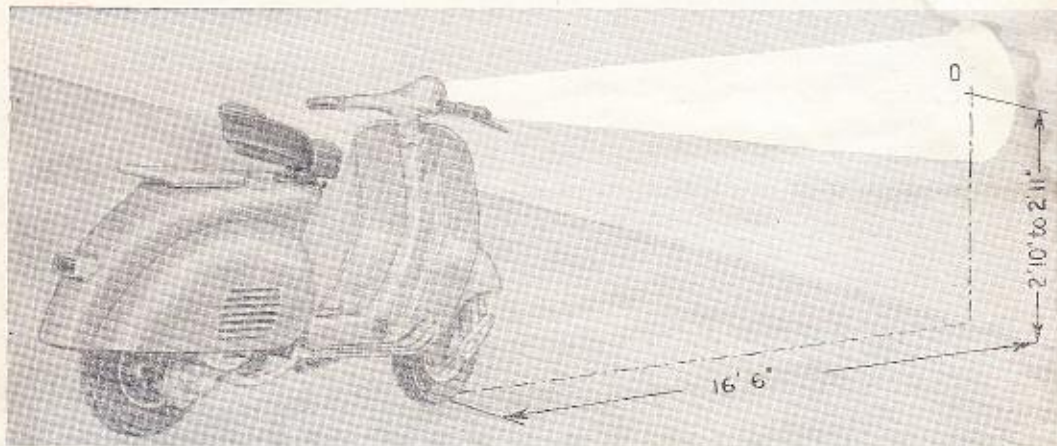


Fig. 16. Adjustment of head lamp.

**N.B.** - The adjustment must be carried out with driver and passenger on the machine.

Place the scooter on a level floor in front of a white wall as seen on Fig. 16.

Start the engine, hold the throttle control twistgrip at about  $1/3$  and set the switch on "main beam".

With two persons on the Vespa, slacken the screw securing the headlamp, then move the latter as required in order that the beam axis coincides with point "O" on the wall.

Tighten the screw firmly.

This operation can be carried out also with driver only sitting on the saddle.

In such a case, of course, the beam alignment should be altered whenever the scooter is being ridden by both driver and passenger.

**Cleaning the scooter.** Brushing with paraffin

and wiping dry with clean rags is advisable for outside cleaning of engine.

All painted surfaces should be washed with water, cleaned by means of a sponge and wiped dry with chamois leather. Do not use paraffin on such surfaces, since it damages paint and turns it dull.

**Before setting the machine in motion,** check oil level in gear box by unscrewing on the crankcase the level screw marked "Oil." When the scooter is upright, oil should just be about to flow out.

**After the first 600 miles.** Replace oil in the gear box by the procedure as explained in the lubrication chart, page 30. The crankcase can be drained through drain hole.

**Every 1,250 miles.** 1. Remove the air cleaner from the carburettor and agitate it in a 30% oil-petrol bath.

2. Check oil level in the gear box (see page 31).

3. Clean the Sparking Electrodes with very fine Emery or suitable files and adjust the Gap to:  $\cdot 023/\cdot 026''$  for K.L.G. F. 70,  
 $\cdot 022/\cdot 026''$  for Lodge H.N.,  
 $\cdot 022''$  for A.C.45 F., and  
 $\cdot 020''$  for Champion L. 86 Plugs.

Inspect the insulation material of sparkplug; replace the latter if the porcelain is cracked. Wash with neat petrol.

Use the sparking plug type prescribed by the Company. We remind owners that the

use of an approved sparking plug will prevent many engine troubles.

4. Clean the two lubricators of front wheel hub and refill them by means of a grease gun. Lubricate the speedometer drive pinion and cable, if necessary.

**N.B. All operations indicated hereunder should be carried out by authorised Service Stations.**

5. Clean and adjust the contact breaker points of the flywheel magneto (see Fig. 17), to  $\cdot 4$  mm gap ( $\cdot 015''$ ).

6. Clean the silencer and decarbonise the engine as explained in following notes.



Remove the silencer, the cooling hood and the cylinder head. Bring the piston to the top dead centre to decarbonise its crown, and clean all carbon deposits from the mouth of the cylinder; then bring the piston to the bottom dead centre and clean the cylinder ports. Decarbonise the inner side of the cylinder head, ensure that the cylinder barrel is free of all carbon.

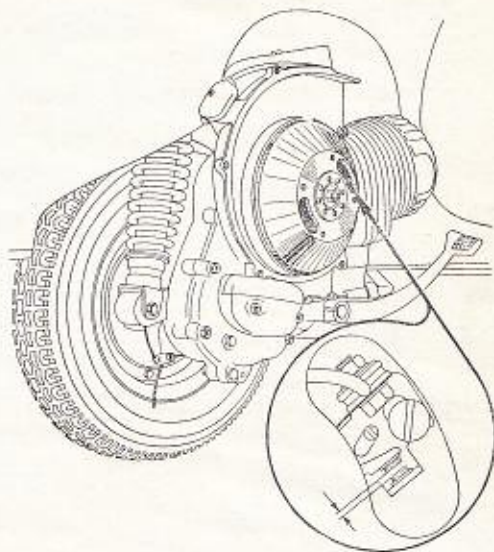


Fig. 17. Breaker points, gap 0.015".

Heat and clean the exhaust pipe of the silencer, either by scraping it internally with a hooked wire or blowing air through from the opposite end; in both cases the silencer should be held so that the exhaust pipe is turned downwards.

**Every 1,800 miles.** Grease the felt which lubricates the cam of flywheel magneto. In case of damper troubles, contact your authorised service stations.

**Laying up.** Clean the Vespa thoroughly. Drop 60 c.c. mineral oil into the engine through the sparking plug hole, and turn the engine over a few times to ensure that a thin oil film spreads all over the internal surfaces to prevent rusting. Support the chassis of the machine on two wooden blocks, ensuring that the tyres are clear of the ground.

N.B. Lubricate exclusively with oil and grease as indicated on lubrication chart, page 30.

After long lay up, in order to prevent formation of air bubbles in the fuel system during the first fuelling, and consequent carburation troubles, remove the air cleaner (**SERVICE STATION**), disconnect the rubber hose from the carburettor and let some fuel drip out to expel air. Then, with the fuel tap open, reconnect the hose to the carburettor. Follow this procedure also

when refuelling after running out of fuel. In case of long storage the carburation may become faulty, though said above precautions have been taken, because of oil deposits in the idling jet due to the evaporation of the petrol contained in the fuel mixture. You should then visit your dealer.

# LUBRICATION CHART

Part to be lubricated		Lubrication				
Every 2,500	Every 5,000	*Shell	*B.P.	Esso	Wakefield	Mobil
Gear-box topping-up	Gear-box change oil	Shell 2T Two-Stroke Oil or Shell X-100 30	Energol Two-Stroke Oil or Energol SAE 30	Esso Extra Motor Oil 20W/30	Castrol XL	Mobililol A
Front suspension Felt pad on fly-wheel cam Joints on brake control Speedo flexible drive	Control cables Gear-change quadrant	Retinax A	Energol L.2.	Esso Multi-purpose Grease H	Castrol L.M.	Mobilgrease M.P.
Engine at each re-fuelling		Shell 2T Two-Stroke Oil in ratio of 5% or $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol	Energol Two-Stroke Oil in ratio of 5% or $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol	Essolube 30 in ratio of 5% or $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol. Esso Two-Stroke Motor Oil in ratio of $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol	Castrol XL in ratio of 5% or $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol. Castrol Two-Stroke Oil in ratio of $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol	Mobililol A in ratio of 5% or $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol or Mobil-Mix in ratio of $\frac{1}{2}$ -pint to $1\frac{1}{2}$ galls. petrol

\* Marketed also by National Benzole Co. Ltd., by arrangement with B.P. & Shell-Mex Ltd.

## APPROVED PETROL/OIL MIXTURE

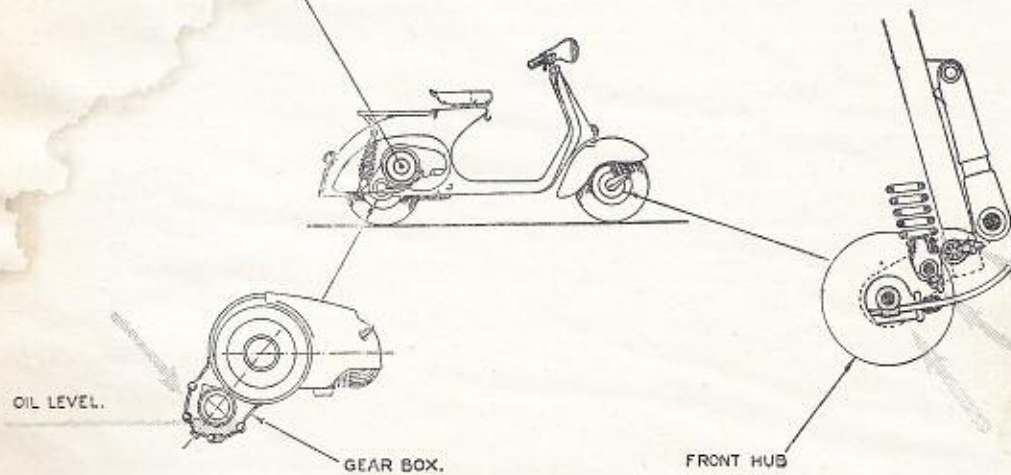
Make	Description
Shell	2T Two-Stroke Mixture
B.P.	B.P.-Zoom
National Benzole Co. Ltd.	Hi-Fli

Hydraulic Dampers

When not working efficiently, consult your Dealer. If servicing is required, they should always be returned to the Works.



ENGINE LUBRICATED BY MIXTURE.



LUBRICATION SCHEME.

## FAULT FINDING

When the machine does not run properly, make all inspections and rectifications as explained below.

If the suggested remedies are not sufficient to eliminate the trouble, the customer should not try to carry out operations pertaining to the dealers, who have the necessary facilities to undertake this work.

Locating the trouble	Remedies
<p><b>HARD STARTING</b></p> <p><b>1. - Fuel system - Carburation</b></p> <p>Fuel tank empty.</p> <p>Fuel does not flow to the carburettor although the fuel tap is open or in position "reserve."</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 10px;"> <p>Filter on carburettor</p> <p>Fuel tap body</p> <p>Carburettor body</p> <p>Main jet and atomizer</p> </div> <div style="font-size: 3em; margin-right: 10px;">}</div> <p>Clogged, dirty</p> </div> <p>Float needle valve sticking in its seating.</p> <p>Engine flooding; air cleaner choked or dirty.</p> <p><b>2. - Ignition</b></p> <p>Sparking plug dirty; porcelain of sparking plug cracked.</p> <p>Breaker points dirty, worn or pitted; gap incorrect.</p>	<p>Turn to "Reserve." Refill as soon as possible.</p> <p>(a) Unscrew and remove the main jet. If the fuel system is efficient, fuel will come out.</p> <p>(b) Blow through jet orifice to ensure that it is clear.</p> <p>Remove and wash in petrol. Blow dry.</p> <p>Release</p> <p>See pages 21 and 26.</p> <p>Disconnect the plug lead. Check if sparking occurs between lead and crankcase when the kick-starter is operated. See page 26.</p> <p>Have the points cleaned (with very fine emery paper or suitable files), or replaced, or the gap adjusted to 0.4 mm (0.015") by a dealer.</p>

Locating the trouble	Remedies
<p><b>INCORRECT RUNNING</b></p> <p><b>1. - Lack of power</b>            Silencer exhaust pipe carbonised.            Sparkplug not well screwed into cylinder head.            Cylinder head not fitting properly into the spigot on top of cylinder.</p> <p><b>2. - Explosions at silencer and carburettor.</b></p> <p><b>3. - High fuel consumption.</b></p> <p>(a) Air cleaner choked or dirty; flap of choke valve sticking in closed or partially closed position.</p> <p>(b) Other troubles (faulty carburettor, poor compression, etc.).</p> <p><b>4. - Engine noisy - Clutch troubles - Gear pinions disengage of own accord - Starter assembly not engaging - Controls not operating properly - Steering column becomes stiff - Inefficiency of suspensions.</b></p>	<p>Clean (see page 27).            Tighten with 21 mm box spanner.            Set the head properly and tighten the nuts.</p> <p>Replace or clean the plug and correct the gap (see page 27).</p> <p>Clean with pure petrol and blow dry.            Dip the metal wadding into a 30% petrol-oil bath.            Release and lubricate the choke lever.</p> <p>See your dealer.</p> <p>See your dealer.</p>

Locating the trouble	Remedies
<p><b>5. - Poor braking</b></p> <p>Stroke of pedal or lever too long.          Brake linings oily or worn down.</p> <p>Brake drums and lining scratched.</p> <p><b>6. - Faulty electric wiring.</b></p> <p>Lead terminals loose or wrongly connected.</p> <p>Incorrect adjustment of the head lamp.</p>	<p>Adjust (see Fig. 15, page 23).          Wash with petrol and dry in air, or replace.          See your dealer about oil leakage.          Replace.</p> <p>Re-connect properly (see Figs. 10-11) or replace          and tighten the screw.          Re-set properly (see page 24).</p>

**NOTICE** - When observing through the red indicator that the pilot light and consequently the tail lamp are off, set the switch to the position "Dipped beam," so that the tail lamp goes on again. Then check the two bulbs and replace the damaged one.

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