THE

RALEIGH

MOPED

RIDING AND MAINTENANCE INSTRUCTIONS

TANK CAPACITY

6½ pints, including ⅛ pint reserve

FUEL

PETROIL: ANY GRADE OF PETROL mixed with one of the following OILS in proportions specified.

Self mixing oils: Wakefield—Castrol 2-stroke Self mixing 1–16
Mobil—Mobil Mix TT 1–16

or **Pre-Mix:** Shell 2T 1–20
B.P. Energol 2 stroke 1–20
Regent Motor Oil 2T 1–20

NOTE *Shell 2T Petroiler Mix and B.P. Zoom available ready mixed from many Garages*

LUBRICATION

for all cycle parts—Chains, brake cables, etc.
Raleigh Industries All-purpose Oil
or Sturmey-Archer Oil

GREASE

for Bottom Bracket layshaft assembly and hubs
Shell Retinax 'A' Grease,
or Wakefield Castrolease LM,
Energrease L2.
Mobil Grease MP
Marfak Multi-Purpose 2 Grease

TYRE PRESSURES *(see page 11)*

CONTENTS

INTRODUCTION

THE RALEIGH MOPED

POWERED BY THE NEW STURMEY-ARCHER 2-STROKE ENGINE

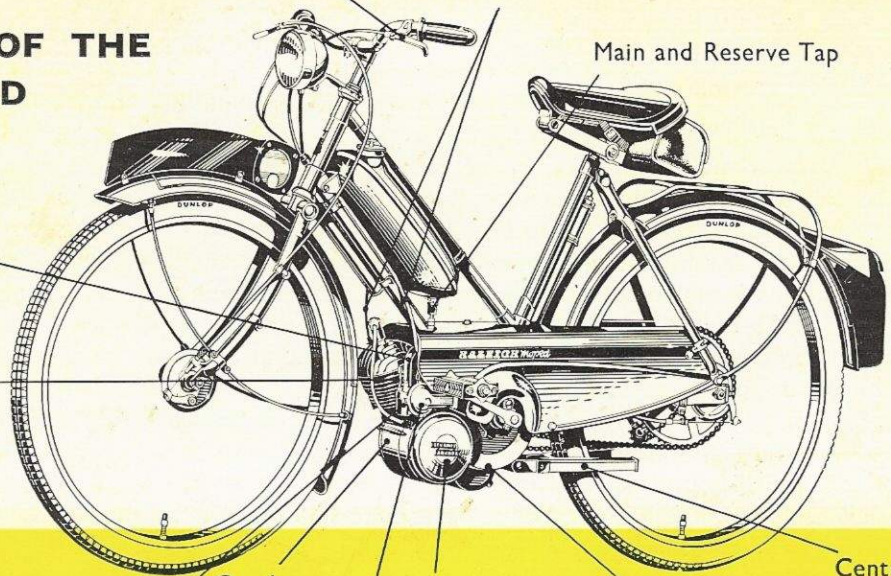
THE RALEIGH MOPED has been introduced to satisfy the need for an inexpensive, efficient and simple means of transport. Because of the simplicity of its design and its sturdy construction, the RALEIGH MOPED is exceedingly easy to operate and maintain in good running condition. With normal care it will give you long and reliable service at very low running costs.

Like any other motorised machine, the RALEIGH MOPED needs some regular attention and servicing to ensure its continued efficiency. It is therefore in your interest to study the notes and advice given in this RALEIGH MOPED handbook.

Drivers without technical knowledge need only concern themselves with the general explanation and the advice on routine maintenance, fault-finding, etc., given in the handbook. The maintenance details given on pages 12–24 are intended for drivers with some engineering experience. Raleigh Moped Service Dealers throughout the country are equipped to carry out all maintenance and repair work and we recommend you to take advantage of their service.

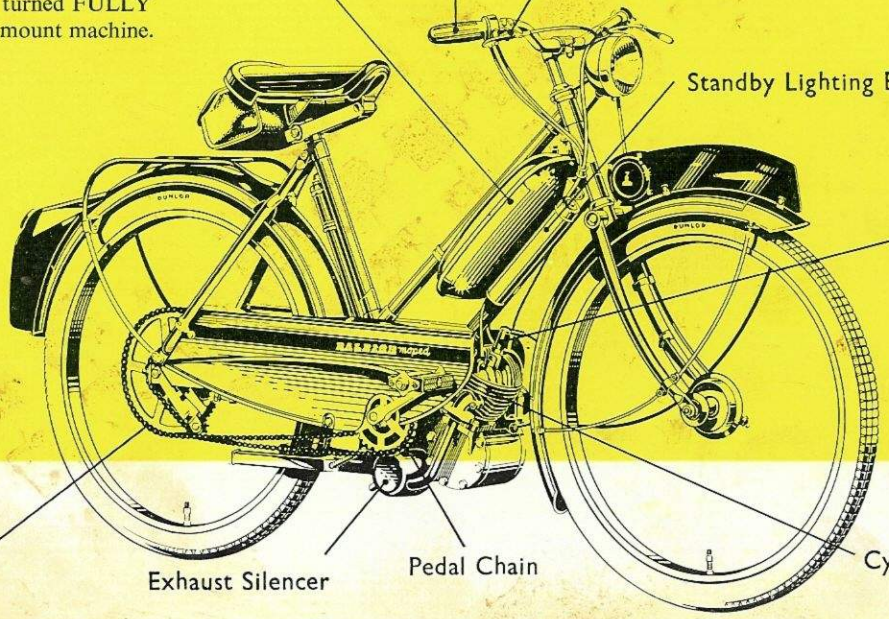
Drivers with technical experience who wish to do their own servicing will find in this handbook all the essential information they require. Driver-mechanics who require a more detailed guide can obtain a 'Service Manual' from Raleigh Moped Service Dept., 5/-, post free. We recommend the services of Raleigh Dealers for any repairs or replacements of a major character.

PRINCIPAL COMPONENTS OF THE RALEIGH MOPED



TWIST-GRIP on right handlebar

Turn AWAY from you to operate decompressor
Turn TOWARDS you to operate throttle
Make sure that Twist-grip is turned FULLY AWAY from you when you mount machine.



NORMAL USE

FUEL

THE RALEIGH MOPED is powered by a Sturmey-Archer 'Two-stroke' engine of very practical and simple design. Like other 'two-stroke' engines, this requires a *mixture of petrol and oil* as fuel. This mixture is called PETROIL and has the advantage of automatically lubricating the moving parts in the crankcase and cylinder when the engine is running.

It is very important that (a) a good quality lubricating oil is chosen for the mixture and (b) that the petrol and oil are mixed in correct proportions, as detailed in the table below.

The Petrol. The Sturmey-Archer engine in the Raleigh Moped will accept any grade of petrol.

The Oil. We strongly advise you to use approved brands of oil listed below *in the exact proportions specified.* Any service station will supply you with the correct mixture or, alternatively, you can prepare the mixture yourself by following our specification. For easy reference, the table opposite is reprinted on the inside front cover of this handbook.

TANK CAPACITY 6½ pints, including ⅓ pint reserve

FUEL PETROIL: ANY GRADE OF PETROL mixed with one of the following OILS in proportions specified.

*Self mixing oils: Wakefield—Castrol 2-stroke Self mixing 1–16
Mobil—Mobil MixTT 16–1

or **Pre-Mix:** Shell 2T 1–20
B.P. Energol 2 stroke 1–20 ★
Regent Motor Oil 2T 1–20

LUBRICATION
for all cycle parts—Chains, brake cables, etc.
Raleigh Industries All-purpose Oil
or Sturmey-Archer Oil

GREASE for Bottom Bracket layshaft assembly and hubs
Shell Retinax 'A' Grease,
or Wakefield Castrolease LM,
Energrease L2,
Mobil Grease MP
Marfak Multi-purpose 2 Grease

TYRE PRESSURES *(see page 11)*

NOTE

1–16 means 1 part of oil to 16 parts of petrol, e.g. ¼ pint of oil to ½ gallon of petrol. 1–20 equal ¼ pint of oil to 5 pints of petrol. *These are *self-mixing oils*. With any of these special 2-stroke self-mixing oils there is no need to pre-mix the oil and petrol. They can be put into the tank separately but the machine should be then given a gentle shake to facilitate the mixing.

Whichever oil you choose, use that brand only; do *not* mix different brands indiscriminately. When you re-fuel at a service station, ask for the brand by name.

Before re-fuelling, it is advisable to switch off the fuel tap.

★ *Shell 2T Petroiler Mix and B.P. Zoom available ready mixed from many garages*

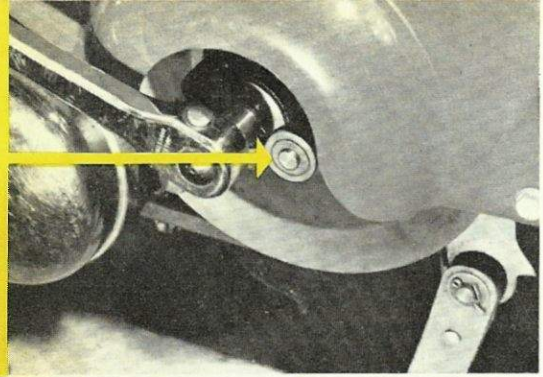
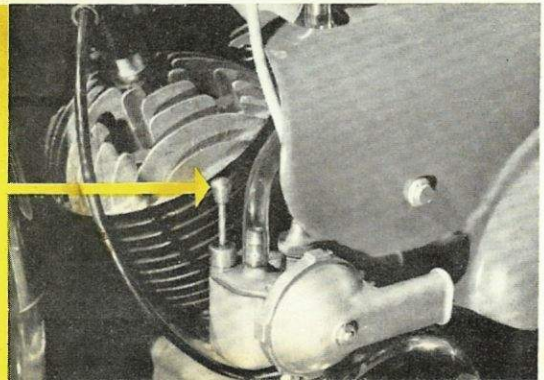


FIG 1



FIG

STARTING THE ENGINE

The Engine can be started in two ways:

a. With the machine on its stand, for testing or 'warming-up' purposes. In cold weather, it is a good idea to warm up the engine in this way before riding off.

b. By pedalling the machine away in the normal manner and then starting the engine.

In either case you must first:

1 Engage the engine by pushing the driving pin IN. *(Fig. 1)*

2 Switch on the main petrol tap.

3 When the engine is cold, or in cold weather, raise the Enrichment Pin *(Fig. 2)* on the carburettor, for 3 or 4 seconds, immediately before starting the engine. This will give you a 'rich' mixture for easy starting but it is not necessary to use this device when the engine is warm.

4 Check that the decompressor is open (twist-grip turned away).

NOW

If the Moped is on its stand:

Push down one of the pedals and, at the same time, turn the twist-grip towards you sufficiently to restore the compression and open the throttle. The engine should now begin to fire. In cold weather, leave the engine running quietly on a small throttle opening for about 2 minutes until it is thoroughly warmed up, then stop engine by opening the decompressor valve again (twist-grip away from you).

To ride the Moped:

With the twist-grip turned away, pedal until you reach a speed of about 5 miles per hour. Turn the twist-grip towards you, first to restore engine compression, then a little further to open the throttle. The engine should now fire. By gradually turning the twist-grip towards you, the throttle will be opened still further and you will gather speed. You then increase or decrease your speed by turning the twist-grip away or towards you.

When the engine fires for the first time, do not stop pedalling immediately; this will assist the engine to pick up enough speed to take over the work of your legs. After a few runs, you will 'feel' the right moment to stop pedalling.

STOPPING

With machine on stand. To stop engine, turn the twist-grip fully away from you.

When riding. To slow down, turn the twist-grip away from you. To stop completely, make sure the twist-grip is fully turned away from you, then apply brakes with steady, progressive pressure.

RUNNING IN

During the first 300 miles of riding a new Raleigh Moped, you should not exceed a speed of 20 miles per hour except for very short periods. Providing the engine is running 'freely' on a down grade, you may go momentarily to 25 miles per hour but never more than 20 miles per hour when the engine is 'pulling'. When climbing hills, please assist the engine by pedalling, until it is run in, after which it will be capable of doing its full work for you.

After the first 300 miles the engine should be sufficiently free to be driven as hard as you wish without causing any trouble. However, after this period it may require a further 1,000 miles or so before peak performance is reached. It is important to observe these running-in limits which will ensure better service and longer life from your engine.

NORMAL RUNNING

The Sturmey-Archer engine, a compact and powerful little power unit, will not normally require pedalling assistance after the initial start.

To prolong engine life, however, it is desirable to pedal-assist the machine at speeds below 5 m.p.h. on level ground and at speeds below 10 m.p.h. on hills. Always try to keep the engine running 'freely'; never let it labour unnecessarily.

Descending hills. When descending long hills, close the throttle and do not let the machine exceed 30–32 m.p.h. for any length of time. Occasionally flick the throttle open momentarily to help lubricate the engine.

Turning. When turning at a slow speed, in a confined area, bring the decompressor valve into use and pedal the machine round. This will prevent any possibility of the engine labouring or, perhaps, stalling.

TYRE PRESSURES

For comfort, safety and longer tyre life, the tyre pressures of the Raleigh Moped should be adjusted to the rider's weight. Pressures should be kept at least to the figures shown in the table below—a little higher won't matter. We advise you to regularly check, or have checked, these tyre pressures.

Rider's Weight	Front Tyre Pressure	Rear Tyre Pressure
9 stones	16 lb. per sq. inch	20 lb. per sq. inch
10 ,,	17 lb. ,, ,, ,,	21 lb. ,, ,, ,,
11 ,,	18 lb. ,, ,, ,,	22 lb. ,, ,, ,,
12 ,,	19 lb. ,, ,, ,,	23 lb. ,, ,, ,,
13 ,,	20 lb. ,, ,, ,,	24 lb. ,, ,, ,,
14 ,,	21 lb. ,, ,, ,,	25 lb. ,, ,, ,,
15 ,,	22 lb. ,, ,, ,,	26 lb. ,, ,, ,,

MAINTENANCE OF THE RALEIGH MOPED

For the first 300 miles (running-in period) and thereafter at intervals of 500 miles

FIRST 300 MILES

After the first 300 miles travel, we recommend you to take your machine to a Raleigh Service Dealer for maintenance. If, on the other hand, you wish to do the maintenance yourself, here are the items which should be attended to.

1 Inspect, and adjust if necessary, *spark plug electrodes* (gap to be 0.020 in.).

2 Inspect, and adjust if necessary, *magneto contact breaker points (see page 21).*

3 Inspect, and adjust if necessary, *brakes. (see page 14).*

4 Inspect, and adjust if necessary, *driving belt (see page 14).*

5 Inspect, and adjust if necessary, both *chains* and lubricate with Raleigh all-purpose oil *(see page* 14*)*.

6 Inspect all engine and bicycle *screws*, *nuts*, *bolts*, etc., to ensure that none have worked loose.

7 Inspect, and adjust if necessary, *steering head races (see page* 16*)*.

8 Adjust *wheel bearings*, if necessary.

9 Inspect, and adjust if necessary, *carburettor and decompressor cables (see page* 17*)*.

10 Grease *bottom bracket assembly* liberally, with one of the recommended greases. Two grease nipples *(see page* 17*)*.

11 Oil the *freewheel.*

12 Check and correct *tyre pressures (see page* 11*)*.

13 Remove *carburettor main jet* and check for cleanliness. Clean only by blowing, do not use wire, etc. *(see page* 19*)*.

14 Ensure that the five *exhaust* outlet pipes are clean. Use cleaning rod supplied.

15 Check *pedal chain tensioner* jockey sprocket spindle nut for tightness and lubricate.

16 Lubricate *pedals* and ensure that they are fully tightened to cranks.

17 Lubricate *all moving parts* not mentioned above, such as brake lever pivot joints, etc.

MAINTENANCE INSTRUCTIONS

The following information is for the guidance of Raleigh Moped owners who wish to carry out their own maintenance. Standard and special Raleigh tools are listed on page 32 and can be obtained from any Raleigh Dealer or direct from Raleigh Moped Service Dept.

Driving Belt Adjustment

Remove right-hand fairing. Loosen lower engine bracket bolt and lever the crankcase forward until the belt is tight. Holding engine in this position, re-tighten clamp bolt. (Correct adjustment is $\frac{1}{4}$" up and down movement in belt).

Brakes Adjustment

Using the knurled finger adjuster on brake cable, adjust as required. Make sure brakes do not bind.

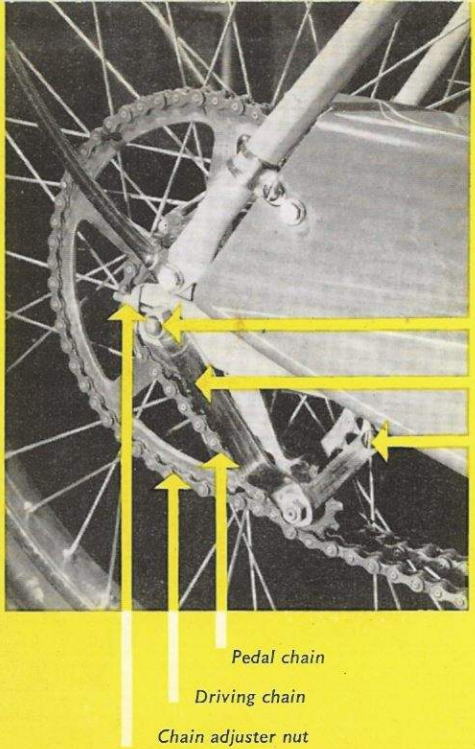
Chains Adjustment—Figs. 3

The driving chain and *not* the pedal chain should be adjusted first: this is essential.

Driving Chain. Slacken off the rear brake anchor arm and pedal chain-tensioner securing screws. Ease off rear spindle nuts. Tighten up chain adjusters as required, leaving $\frac{3}{4}$ in. slackness in driving chain at its tightest point.

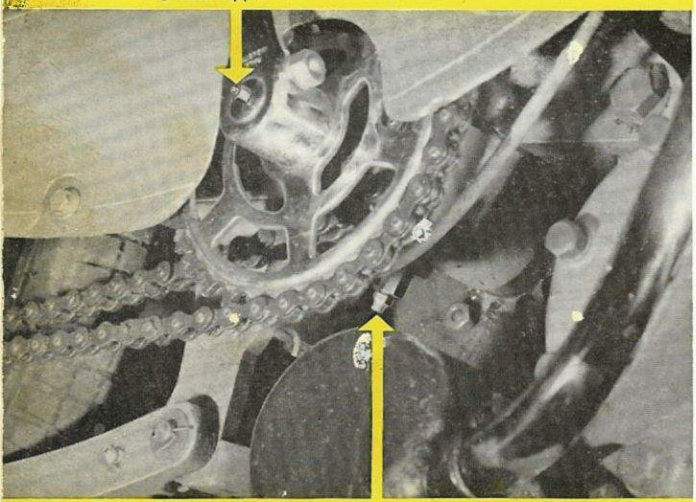
Pedal chain. Pivot rearward the chain-tensioner arm until $\frac{3}{4}$ in. slackness is obtained. Next, tighten the rear axle nuts, brake anchor arm screw and chain-tensioner pivoting screw. Finally, check chain adjuster nuts for tightness and lubricate both chains with Raleigh all-purpose Oil.

IMPORTANT. It is preferable to have the chains adjusted on the slack side, rather than that they should be too tight.


Rear spindle nut
Chain tensioner arm
Chain tensioner pivoting screw
Pedal chain
Driving chain
Chain adjuster nut


Chain adjuster nut
Rear spindle nut
Anchor arm securing screws

FIGS 3 15



Bottom bracket grease nipple

FIG 4

Steering Head Adjustments

Slacken off head locking nut. Using 'C' spanner provided in kit, adjust knurled ring, taking care not to over-tighten. Re-tighten locking nut and re-check steering for tightness.

Wheel Bearings Adjustment

This is effected by the notched cone adjusting washer, which fits over the flats of the left-hand cone.

Slacken off the left-hand wheel spindle nut and the lock nut situated inside the fork ends. Screw up the notched cone adjusting washer, finger-tight, then slacken off half a turn. Now make sure that the wheel revolves freely; this is most important, as tight wheel bearings cause considerable loss of power and damage to the hub assembly. EVERY 5,000 MILES DISMANTLE HUBS AND BEARINGS AND REPACK WITH ONE OF THE RECOMMENDED GREASES.

Carburettor & Decompressor Cables —Adjustment

1. **The carburettor cable** can be adjusted by means of the knurled adjuster and lock nut, at the carburettor end of the cable.

2. **The decompressor cable** can be adjusted by means of the solderless nipple at the cylinder end of the cable. Always make sure that a small amount of free play is allowed. Otherwise there will be a tendency for the decompressor valve not to seat correctly.

Bottom Bracket—Greasing—Fig. 4

There are two nipples, situated as shown in Fig. 4. Grease liberally until grease exudes from between the drive sprocket and bottom bracket sleeve. Use one of the recommended greases for this purpose.

Freewheel—Oiling

Use Raleigh all-purpose Oil or Sturmey-Archer Oil and lubricate along the revolving face of the freewheel.

Worn Driving Belt—Replacement —Figs 5 and 6

The special tool MS-11 required for this operation is listed on page 32 and can be obtained from your Raleigh Dealer.

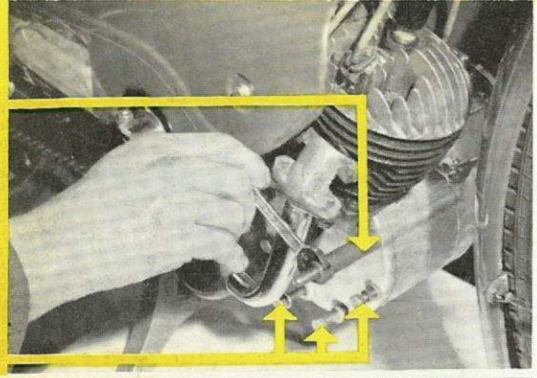
Replacement of the driving belt will be necessary only after many thousands of miles have been covered.

To remove the belt. Remove both fairings. Then ensure that the crankcase is free from oil and dirt. **This is most important** to prevent dirt entering the crankcase joints after the distance piece has been removed.

Slacken off the lower engine mounting bolt nut.

FIG 5

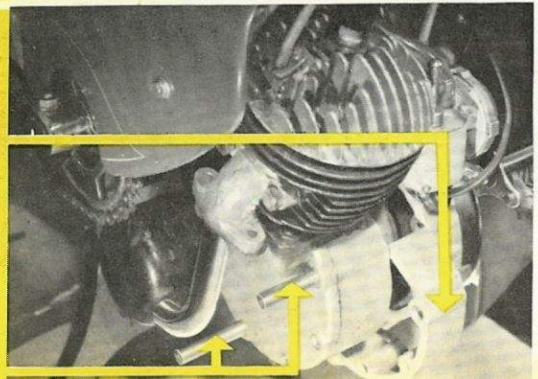
Dowel extractor Tool No. MS11



Crankcase bolts

FIG 6

Distance piece



Dowels

This allows the engine to be pivoted backwards and enables the belt to be lifted over the drive pulley.

Remove the four front crankcase bolts *(see fig. 5)*. With the special tool MS-11, withdraw both dowels the full amount allowed by the extractor. This allows the distance piece *(see fig. 6)* to be withdrawn and the belt removed.

To fit a new belt. Reverse the above sequence.

Carburettor. Amal type No. 385/1 —Cleaning & Adjustment

The carburettor, operated by the twist-grip, provides the correct mixture of petrol and air at all engine speeds. This mixture is formed by a spray of petrol entering through the jet, and air drawn through the air filter. A partially blocked jet or air filter will therefore alter the mixture strength and cause erratic running.

To remove the main jet or air filter for cleaning, it is not necessary to remove the carburettor from

the engine. For complete cleaning of the float and starting chambers, however, the removal of the carburettor is recommended. When re-fitting the carburettor, make sure that it is pushed right home on the induction pipe and that the fixing clip is tight with the carburettor in a vertical position.

Main Jet—Removal—Fig. 7

To remove the main jet, unscrew the jet cap nut, taking care not to damage the fibre washer fitted between the body and cap nut. Using a small screwdriver, unscrew the jet from the body and blow through from the tapered end. **Never use a pointed or sharp instrument to clean out the jet, as this will damage and enlarge the orifice.**

MOST IMPORTANT. When replacing, make sure that the jet is fully tightened, to prevent any petrol leakage past the jet.

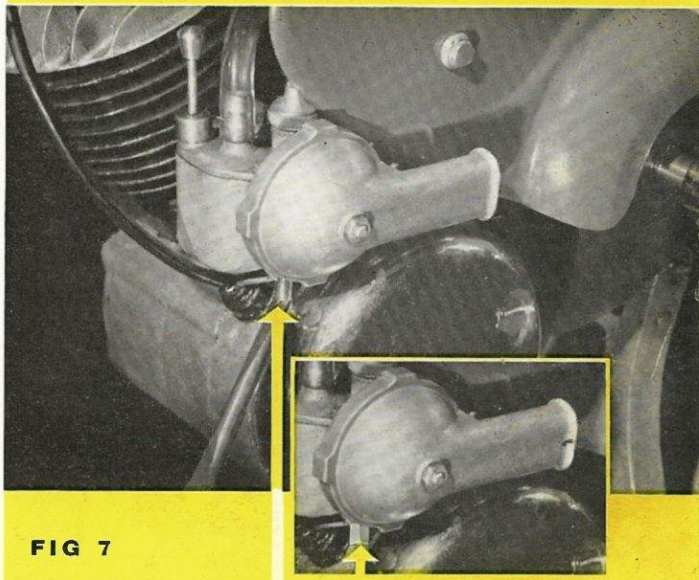


FIG 7

Air Filter—Cleaning

This will be required every 2,500 miles—or more frequently, if used in a very dusty or dirty condition.

To dismantle: unscrew the retaining nut and remove cover. Unscrew centre bolt and remove the three perforated metal filter plates. Wash all parts thoroughly in petrol. Wipe clean and re-fit, ensuring that cover is seated correctly.

Float Chamber—Cleaning

First remove main jet. Then unscrew knurled mixing chamber top and withdraw throttle valve and needle. Remove the two screws securing the float chamber top cover, lift off cover and remove float.

Flush out float and starting chambers with clean petrol.

Re-assemble carburettor, taking great care, when replacing float chamber cover, that float and enrichment needles are correctly located in their respective seating holes.

MAINTENANCE OF LUCAS LIGHTING EQUIPMENT & FLYWHEEL MAGNETO

Flywheel Magneto Contact Breaker Points—Adjustment—Figs 8 & 9

To check the gap, look through the flywheel inspection windows and turn the engine until you see that the contact breaker points are fully open. The gap should measure 0.014 in. to 0.016 in. If it does not, re-set as follows:

Slacken fixed contact plate securing screw *(see fig. 8)* and insert the blade of a screwdriver between the two cast projections on the stator base plate and the notch in the fixed contact plate *(see fig. 9)*.

Twist the screwdriver, clockwise or anti-clockwise, until the gauge is a sliding fit between the contacts. Re-tighten the screw and re-check the gap.

Lucas Headlamp, Model MCH64—Bulb Replacement

To reach the bulbs, slacken the knurled nut under the lamp rim, withdraw front rim and light unit.

Fig. 9

FIGS 8 & 9

The bulb-holder, a bayonet fitting type, can now be removed from the reflector and the bulbs withdrawn.

Use these bulbs for replacement:

Main Bulb: 6 volt, 15/15 Watt (Non-reversible Lucas No. 386).

Parking Bulb: 3.5 volt, 0.15 amp Lucas No. 974.

Lucas Rear Lamp, Model 590—
Bulb Replacement

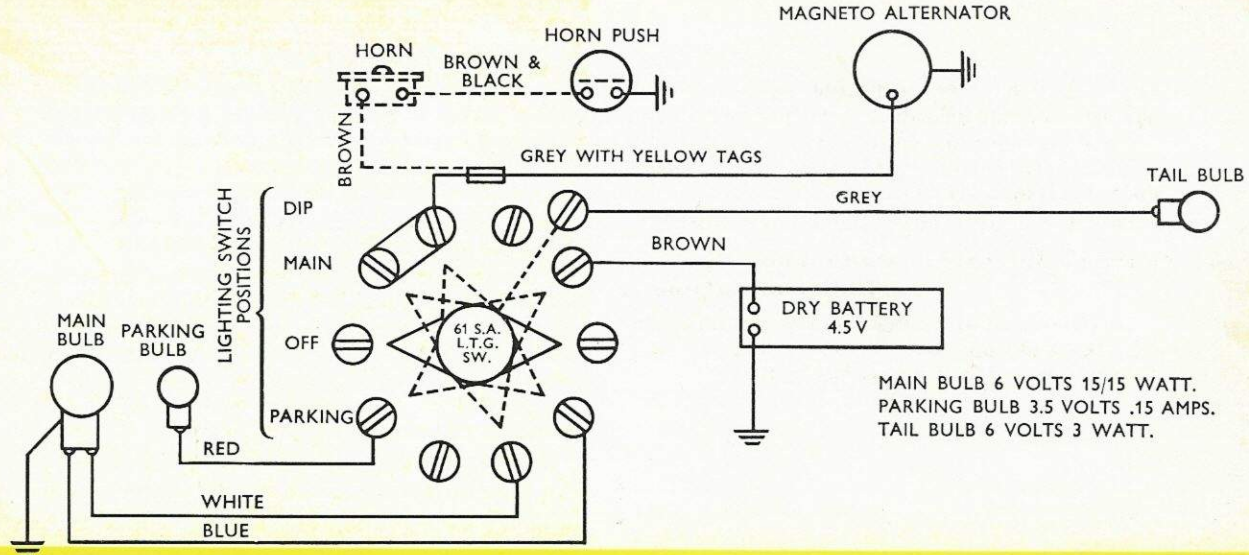
To gain access to the bulb, remove the lens securing screw and withdraw the lens moulding.

Bulb: 6 volt, 3 Watt Lucas No. 990.

RALEIGH

MOPED

WIRING DIAGRAM


MAGNETO ALTERNATOR
HORN
HORN PUSH
BROWN & BLACK
BROWN
GREY WITH YELLOW TAGS
TAIL BULB
GREY
BROWN
LIGHTING SWITCH POSITIONS
DIP
MAIN
OFF
PARKING
61 S.A. L.T.G. SW.
DRY BATTERY 4.5 V
MAIN BULB
PARKING BULB
RED
WHITE
BLUE
BULB HOLDER EARTHED TO LAMP BODY
MAIN BULB 6 VOLTS 15/15 WATT.
PARKING BULB 3.5 VOLTS .15 AMPS.
TAIL BULB 6 VOLTS 3 WATT.

HOW TO DECARBONIZE THE ENGINE

The simplicity of the Sturmey-Archer 2-stroke engine makes it possible for the Raleigh Moped owner to carry out decarbonization himself. Providing he carefully follows our instructions, a first-class result can be achieved.

When Decarbonizing is necessary

The need for decarbonizing is usually indicated by a falling-off in power. Under average conditions, this will usually occur at intervals of approximately 2,000 miles, providing the recommended fuel mixture is used.

How to Proceed

First remove the engine fairings. Then clean the engine externally with paraffin or petrol, using a stiff brush. Next, remove the spark plug cover, unscrew spark plug from cylinder head and disconnect petrol pipe, remove the carburettor complete and

disconnect the de-compressor cable. The next step is to remove the four cylinder head holding-down bolts, spring and plain washers, enabling the cylinder head to be lifted off the cylinder. Remove the cylinder head gasket.

Now remove the two bolts holding the exhaust elbow to the cylinder and the nut and bolt holding the silencer to the crankcase lug. The complete exhaust system can now be removed, together with the gasket between the elbow and cylinder.

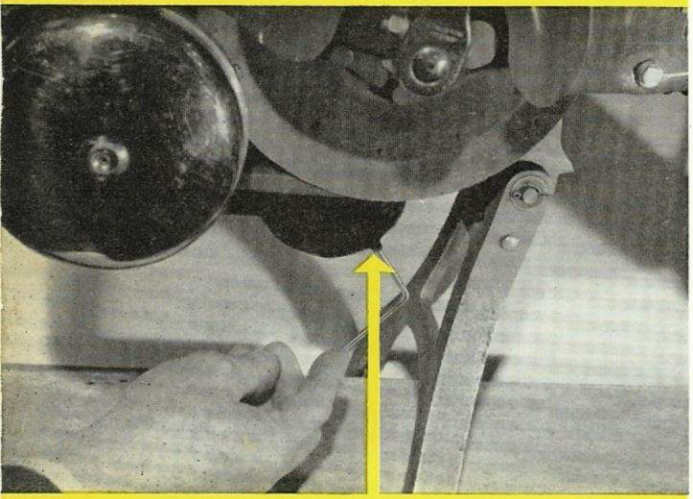
Removal of Carbon and Cleaning of Parts

a. **Spark plug.** Clean electrode and earth contact. Check gap and re-set, if necessary, at .020 inch.

b. **Cylinder Head.** Commence by removing carbon from cylinder head — using a scraper made of soft copper, aluminium, or any other suitable material which will not damage the soft aluminium cylinder head. Remove decompressor valve and scrape valve stem clean; if any sign of burning is noticeable on the valve seat, the valve will have to be ground-in until seat is smooth and clean, using a fine grinding paste. Wash clean with petrol or paraffin and re-fit to cylinder head.

c. **Ports and Piston.** With the piston positioned at the bottom, scrape the exhaust port clear of carbon, using an old penknife. Clean out the hole which runs from the top face of the cylinder into the exhaust port, with a piece of stout wire. Also, if necessary, clean the transfer ports. (Take care not to scratch the cylinder bore). Loose carbon may have entered the cylinder—make sure that it is removed. (A cycle pump can be used to blow it away).

With the piston positioned at the top of the cylinder, carefully scrape away all carbon from piston crown and cutaways. Blow away all loose carbon.



Cleaning out exhaust outlet pipes

FIG 10

d. **Exhaust silencer Fig. 10.** Using the tool provided, clean exhaust outlet pipes. (These protrude approximately $2\frac{1}{2}$ inches into the silencer). The dislodged carbon can now be shaken out, via the exhaust pipe.

e. **Exhaust Pipe and Elbow.** With a penknife, scrape away all carbon from inside the exhaust pipe elbow.

Re-assembling

On re-assembling, new gaskets should be used throughout. No jointing cement is necessary.

Re-fit cylinder head, taking care to tighten the four holding-down bolts evenly. Replace spark plug and connect suppressor and lead. Re-connect decompressor cable, refit carburettor and connect up petrol pipe. Re-fit exhaust system to cylinder and tighten all bolts.

After re-fitting engine fairings, the machine will then be ready for use again.

HOW TO TRACE FAULTS

With normal care and maintenance, the Raleigh Moped will give you long and reliable service. You will not be inconvenienced by many troubles inherent in more complex machines. Any faults in operation that may arise will probably be of a minor character which you can easily rectify yourself. The causes may be very simple, perhaps nothing more than lack of fuel or a loosened connection. By checking any 'faults' with the following guide, you will usually find the reason and then you can do your own 'servicing' or take the machine to your Raleigh Dealer.

If ENGINE FAILS TO START

POSSIBLE CAUSES

1 No fuel.
2 Fouled spark plug, blocked jet or obstructed fuel supply.
3 If the spark plug is wet when tested for a spark, try a spare plug.

If ENGINE STOPS SUDDENLY

POSSIBLE CAUSES

1 Out of fuel. Switch on reserve supply tap or fill up *(see Fig. 11)*.

NOTE: By pulling out the driving pin connecting the engine to transmission *(see Fig. 1)*, the machine can be pedalled to the nearest filling station as easily as a bicycle.

2 Disconnected H.T. lead.
3 Fouled spark plug. Clean plug or fit spare.

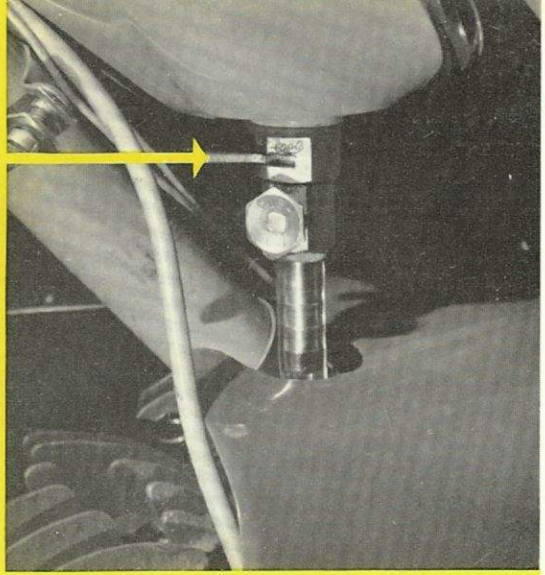


FIG 11

If ENGINE LACKS POWER

1 Carbon deposit in exhaust port or exhaust outlet pipes: Decarbonization is necessary.
2 Partially blocked jet: clean jet and also carburettor, if necessary.
3 Engine ignition timing incorrect: consult a dealer.
4 Decompressor valve not seating correctly: consult a dealer.

If ENGINE 'FOUR STROKES'

i.e. The hum of the engine changes to a more staccato and slower note.

1 Transfer ports partially blocked with carbon deposit: decarbonization necessary.
2 Exhaust port or exhaust system blocked with carbon deposit: decarbonization necessary.
3 Sticking float: clean carburettor.
4 Throttle needle too high; lower needle one notch.

5 Carburettor enrichment needle not seating correctly. Check for uneven seating or dirt. Clean or replace if necessary.

If ENGINE RUNS IRREGULARLY

1 Spark plug gap incorrect: re-set.
2 Contact breaker points gap incorrect: re-set or consult dealer.
3 Faulty fuel supply (check jet and filters).
4 Decompressor valve not seating correctly: consult dealer.

If ENGINE RUNS TOO HOT

1 Jet too small, throttle needle too low: replace by larger jet or raise needle one notch.
2 Brakes binding: adjust.
3 Engine ignition timing incorrect: consult dealer.
4 Insufficient cooling, due to cylinder fins being filled, and crankcase covered with dried mud.

If ENGINE BACKFIRES IN CARBURETTOR

1 Fouled spark plug: clean or replace.
2 Partially blocked jet or water in carburettor: clean carburettor.

If CARBURETTOR FLOODS

1 Dirt between float needle and seating: remove and clean.
2 Punctured float: replace by new float—do not attempt to solder old one.
3 Bent float needle: replace by new float.
4 Carburettor enrichment needle not seating correctly: check for uneven seating or dirt. Clean or replace if necessary.

RALEIGH MOPED

TECHNICAL DATA

ENGINE

Single cylinder Sturmey-Archer two stroke with twin transfer ports and flat topped piston. Aluminium alloy cylinder head and crankcase, close grained cast iron cylinder barrel. Aluminium alloy piston with chrome plated top ring, plain lower ring.

BORE 38 mm. (1.496 in.).

STROKE 44 mm. (1.732 in.).

CUBIC CAPACITY

49.9 c.c. (3.04 cu. in.).

COMPRESSION RATIO 6.2 to 1.

MAXIMUM POWER OUTPUT

1.3 B.H.P. at 4,300 R.P.M.

CRANKSHAFT

One piece type, supported on large capacity ball and needle roller bearings.

CONNECTING ROD

16, 5mm. rollers at big end phosphor bronze bush at little end.

CARBURETTOR

Amal type 385/1 with enrichment device for cold starting. Combined air silencer and filter. Normal jet size 40.

IGNITION

Lucas 7 F1 Flywheel magneto Alternator with lighting coil. Contact breaker gap 0.015 in. (0.014 in. to 0.016 in. acceptable): Lodge spark plug H H 14. or Champion L 5J. Ignition advance $\frac{5}{32}$ in. (0.156 in.) before top dead centre. Sparking plug gap 0.020 in.

LIGHTING

Head Lamp Lucas MCH 64. Tail lamp Lucas L 590. Main bulb 6 volt 15/15 watt Lucas No. 386. Pilot Bulb 3.5 volt 0.15 amp. Lucas No. 974. Tail bulb 6 volt, 3 watt Lucas No. 990. Parking batteries either Drydex T20 or Ever Ready U 2 or other equivalents.

TRANSMISSION

Primary Drive: Fenner A26 or A26R or Goodyear V.480 endless Vee belt. Secondary drive: $\frac{1}{2}$ in. pitch $\times$ $\frac{3}{16}$ in. wide roller chain 112 links.
Pedal drive: $\frac{1}{2}$ in. pitch $\times$ $\frac{1}{8}$ in. wide roller chain, 105 links.

LUBRICATION

Lubricate all cycle parts, e.g. chains, brake cables etc., with RALEIGH INDUSTRIES ALL PURPOSE OIL or STURMEY-ARCHER OIL.

Use only recommended greases shown on page 7 to grease the Bottom Bracket layshaft assembly and hubs.

The engine is lubricated with petroil mixture. Use only the recommended oils shown on inside front cover.

RALEIGH MOPED

TOOLS AND ACCESSORIES

Standard tool kit

The standard tool kit supplied with your Raleigh Moped Mark 1 should include the following tools. Replacements can be obtained from your dealer.

LIST Reference Nos.

ME 73 Jet Screwdriver
ME 74 Sparking Plug Spanner
ME 75 Cylinder Head Spanner
ME 76 Spanner
P 1463 Combination Spanner
P 1464 "C" Spanner

Recommended extras

The following accessories and tools will prove useful additions to your tool kit and can be obtained from your dealer.

Tyre pressure gauge
Spare spark plug
Spare bulbs
Puncture outfit and tyre levers

Maintenance tools

A special Raleigh tool for the maintenance described in this handbook can be obtained from your dealer.

LIST Reference No. MS 11 Dowel extractor

THE

RALEIGH

MOPED

is manufactured in Great Britain by

RALEIGH INDUSTRIES LTD.,
Nottingham

SERVICING and SUPPLY OF SPARES

Raleigh Service Dealers throughout the country are equipped to carry out the recommended maintenance, repairs and supply of Raleigh tools and spares. You are advised to deal only with authorized Raleigh Moped dealers and to use only genuine Raleigh spares for replacements.
In case of difficulty, or to obtain the address of your nearest Raleigh dealer, write to the Raleigh Moped Service Dept., address as shown opposite.

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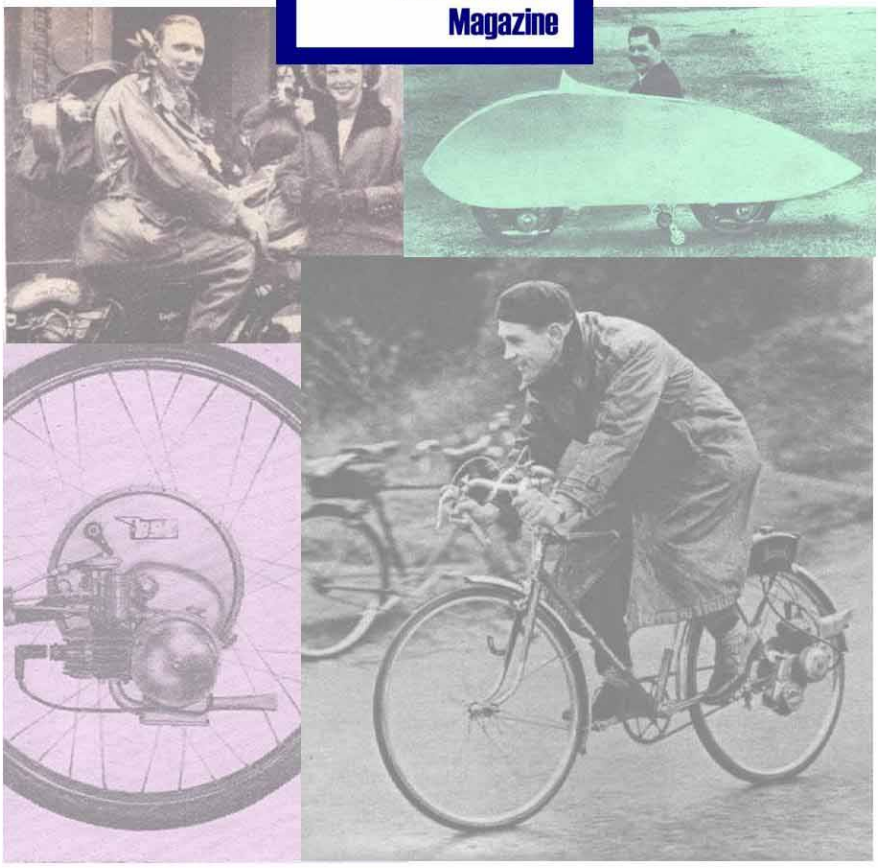

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