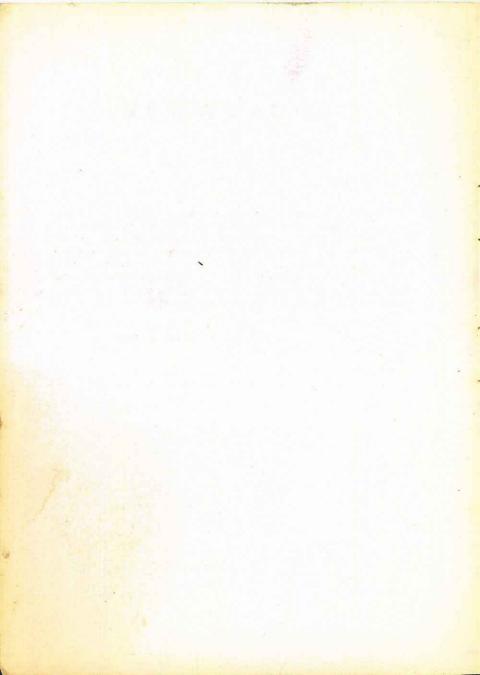
Mobylette



Operation - Lubrication - Maintenance



MOTOBÉCANE MOTOCONFORT



#2.00

FOREWORD



Since November 1949, more than 9 millions of MOBYLETTE have been turned out. The sucess of these machines is due to their road-holding, comfort, driving pleasure, and maintenance simplicity. This owner's guide has been issued to enable our customers to carry out this maintenance in the best conditions and to get the best performance of their machine. We therefore advise the MOBYLETTE owner to read this guide with the greatest attention and to follow our instructions very closely.

Besides and still in their own interest, we recommend our customers to have their insurance policy in order and to adhere strictly to the Highway Code.

Moreover the MOBYLETTE is covered by a six months guarantee under the conditions indicated in this owner's guide.

The MOBYLETTE is covered by the french patents S.G.D.G.

and a great number of foreign patents.

Further more the names MOBYLETTE, MOBYMATIC and DIMOBY are patented themselves.

Mobylette 92 - 93 and Special

The MOBYLETTE 92, 93 and MOBYLETTE SPECIAL are mopeds or motordriven cycles. They are useful means of transport in which the engine and frame are perfectly combined to provide maximum riding comfort on the road. Comfort is ensured by balloon-type tyres and stability by the engine position providing a very low centre of gravity.

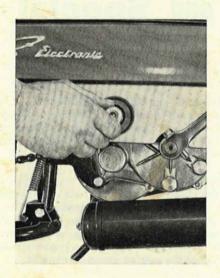
The MOBYLETTE controls are grouped in a single twist-grip on the right hand side. When the twist-grip is "at rest", the engine idles and the decompressor is closed. When the twist-grip is turned clockwise, the engine is decompressed, in other words it only opposes a low resistance to starting, but still does not run. When the twist-grip is turned counter-clockwise, the control actuates the throttle which enables the engine speed to be regulated. You can therefore adjust the running speed as required.

The MOBYLETTE has two brakes, the front brake being controlled by the right hand. Only apply the brakes if the twist-grip is "at rest" because the MOBYLETTE's engine provides the best braking power.

RIDING AS A BIKE



You can ride your MOBYLETTE as a bike if you want to and the MOBY-LETTE 92, 93 and MOBYLETTE SPECIAL models feature a two-position relay-box (Engine-Cycle). This relay-box is equipped on R.H. side with a two-way button: Pushed: ENGINE - Pulled:CYCLE. This button must only be operated

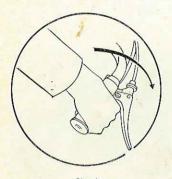


when the machine is at standstill. To change from Engine to Cycle, you pull the button outwards, turn it a quarter, and leave it come back to his "Position Cycle". To come back to "Engine Position", turn the button a quarter turn and push the machine, the button will move inwards by itself.

OPERATION

STARTING THE ENGINE

- 1st Open fuel-tap (see page 7).
- 2nd Fully decompress by turning the twist-grip completely clockwise pedal as on a bicycle until the engine rotates **keeping the twist-grip in that position** (Pict. 1).



Pict. 1



Pict. 2

3rd The MOBYLETTE beeing at walking speed, turn quickly the twistgrip toward yourself i.e. counter-clockwise (Pict. 2). The engine must run.

STARTING WITH PEDAL ON KICK STAND

- 1st While keeping the twist-grip completely turned clockwise i.e. "decompressed", start the engine by pushing down energetically the pedal until his lowest position (Pict. 4).
- 2nd The engine starting to rotate, turn quickly the twist-grip toward yourself.
 The engine should start and the rear wheel gets into motion.

Never sit on the saddle and pedal when moped is on its centre stand (Pict. 3).



Pict 3

Wrong position

The proper way to start



Pict. 4

Proper position

3rd Apply the rear brake and leave the engine idle. Set the machine down on its wheels and ride off, opening the throttle.

This starting method can be used under all circumstances, but it is particularly useful when starting on a hill, since it avoids to pull the machine until the engine reaches the speed at which the clutch engages.

It is to notice, when putting your MOBYLETTE on centre stand, you never must leave your moped fall backwards, but on the contrary you must accompanie it, supporting the rear of the machine until it comes in stable position.

By cold weather, to help starting, operates the choke lever on the left side on handlebars with your left thumb. This lever is reached without the hand having to leave the handlebars. It should be used a few moments. It will swing back automatically by a spring. It should be used only if bad weather conditions.

The MOBYLETTE SPECIAL 93 D features an electric starter generator which works as follows:

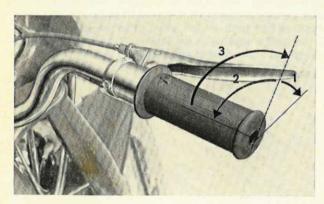
After switching the ignition (ignition key on headlamp) leave the twist-grip at rest (idling) press the starter button (R.H. side on handlebars) and apply the rear brake at the same time (lever on L.H. side). This procedure switch on the ignition which allows the working of the starter. It prevents the driving off sudden of the machine, in the case of a driver which should have left the twist-grip open.

DRIVING

TO REGULATE THE SPEED

After starting the engine as explained above, just open throttle by turning the twist-grip counter-clockwise to start moving you MOBY-LETTE (Pict. 5).

When driving the speed is regulated by opening the twist-grip more or less.



- 1. Decompress
- 2. Accelerate
- 3. Slow down

Pict. 5

TO SLOW DOWN AND STOP

To slow down, turn the twist-grip back clockwise at rest, and if necessary, apply both brakes.

When the MOBYLETTE's speed is back at walking speed (6 km/h), either with the brakes, or slow down by closing the throttle, without decompressing, the clutch is released and frees the engine from the drive pulley. With the twist-grip at rest, the engine idles.

With the MOBYLETTE at a standstill and the engine idling, you only need to open the throttle to ride off again. (This is made possible by the DIMOBY automatic clutch.)

Since the machine features a MOBYMATIC automatic gear change, the system automatically adjusts the appropriate gear ratio according to the road conditions.

When riding down long hill, remember that your engine is your best brake and allows, throttle at rest, to descend hill up 10% at reasonable speed. The twist-grip at rest, you can apply both brakes to stop in case of emergency. When riding down very long slopes, in mountain, never close the fuel tap, as the lubrication of the engine should stop without saving much fuel. Since your machine features a MOBYMATIC gear change, it can climb all gradients without your having to pedal. Don't ride down hills with the relay-box in the cycle position.

TO STOP ENGINE

A full stop requires in the last meters the decompressor action by rotation of the twist-grip clockwise (Pict. 5).

When parking do not forget to shut the fuel tap.

MIXTURE

We recommend the BP ZOOM self-lubricating blend.

When without BP ZOOM blend you can use as mixture:

1st The oil TWO STROKE ZOOM INTERNATIONAL in a percentage 5%,

2nd If this oil is not available, use any good two stroke oil of any great international brand in a percentage 5%.

Our guarantee is only applicable if the instructions particular to the mixture are followed.

PETROL-TAP

There are different types of petrol-taps:

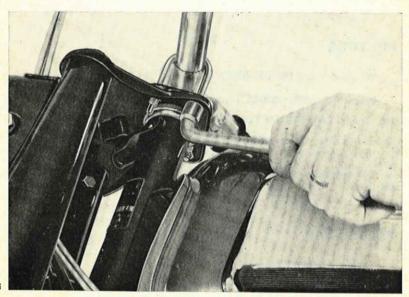
- screw-type (92). Open when completely unscrewed,
- push-button type (SP 93, 93 D). Open when pushed in,
- turn-type with reserve (SP 94 TT). Open when forward.
 Closed when backward.
 Reserve when down.

TURN SIGNAL LAMPS - STOP LIGHT

The 93 D De Luxe version is fitted with turn signal lamps and a stop light. The turn signal lamps are controlled by a two-way switch on the left hand side of the handlebars.

ADJUSTING THE HANDLEBARS

You can adjust the position of the handlebars. To do this, just loosen the nuts retaining the U clamps with a size 10 spanner (Pict. 6).



Pict. 6

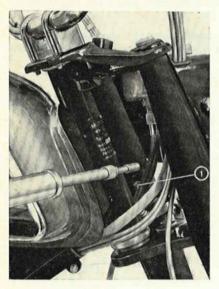
RUNNING-IN

Our engines feature exceedingly hard-walled chromium-plated aluminium bores and they are factory-fitted with a minimum play. The engine cannot give maximum power before 1.500 km.

You must run-in your machine properly, using it under normal conditions without any straining or overheating when going uphill. Also, don't run the engine at high speed for too long.

You won't have to add any oil during the run-in period if you use BP ZOOM mixture.

MAINTENANCE



LUBRICATION

RELAY-BOX

Fill the relay-box with 85 cm³ oil BP Energol SAE 40 and check the level, the oil must make flush with the plug.

At 500 km, drain away the oil.

Then check the level every 2.000 km and change the oil each 4.000 km.

EVERY 1,000 km

Pict. 7

TELESCOPIC FRONT FORK

Lubricate the telescopic front fork using a pressure-pump through the grease nipples behind each fork sheath with BP ENERGREASE C 3 G (Pict. 7).

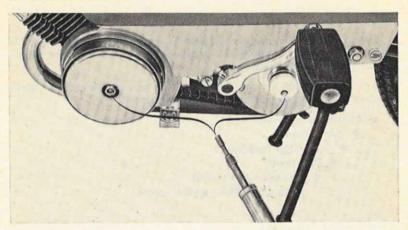
CHAIN

Lubricate the chain with BP ENERGOL SAE 50 MOTOR OIL every 1.000 km, using a brush and depositing the oil inside the chain. Rotate the wheel so as to grease the whole chain.

Never dip the chain in grease-removing liquid (such as trichlorethylene). This would dry up the rollers.

AUTOMATIC GEAR CHANGE « MOBYMATIC »

Brevet S.G.D.G. René MANGIN



Pict. 8

Lubricate at the same time the clutch and the pulley of the automatic gear change through the central grease nipple, with BP ENERGREASE C.3 G.

Lubricate the driven pulley of the automatic gear change through the central grease nipple with BP ENERGREASE C 3 G (Pict. 8).

EVERY 6.000 km

HUBS

Fill front and rear hubs with BP ENERGREASE L 2 Multipurpose without excess every 6.000 km.

MISCELLANEOUS

Lubricate speedo drive with BP ENERGREASE C 3 G. Periodically lubricate the various controls and cable inlets with BP Domestic Oil, using a brush.



Pict. 9

DECARBONIZING

The recommended BP ZOOM blend only leaves small and easily removable carbon deposits.

Every 6.000 km have the exhaust silencer decarbonized by a MOBYLETTE Dealer, and every 12.000 km have the piston-top, cylinder head and cylinder exhaust ports decarbonized.

The figures—6.000 km and 12.000 km—are only indicative. You should decarbonize as soon as you notice the following faults:

- ★ Engine losing power
 - ★ Bad starts
 - ★ Carburetter backfires
 - > Dirty plug
 - ★ Excessive overheating
 - ★ Irregular "four-stroke" cycle.

BATTERY (93 D)

The 93 D is equipped with two 6-volt batteries and a electric startergenerator. The 93 D De Luxe model is fitted with front and rear turn signal lamps and a stop light.

1st If the batteries do not give maximum power, recharge them.

Note: You can check the state of the batteries by measuring the electrolyte density. If this is below 1.21, the battery needs to be recharged.

2nd You should frequently check, especially during the summer, the electrolyte level and top it up, if necessary, with distilled water. The water must go to about 15 mm above the top edges of the plates. Don't forget this procedure after recharging the batteries.

3rd Keep the batteries clean and dry. Lightly grease the terminals with a neutral acid-resisting grease.

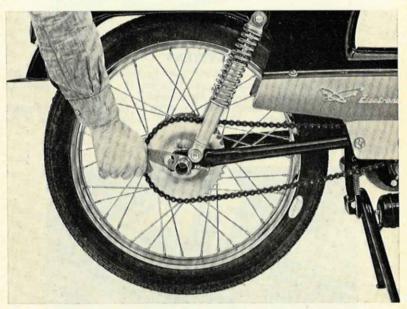
TYRE PRESSURES

Front: 1,500 kg (22 lbs). Rear: 1,800 kg (26 lbs). If using a dual-seat model, rear pressure: 2,200 kg (31 lbs).

PUNCTURES

The rear fork-end is open at the back. Unscrew the axle nuts fully (without removing them) so as to be able to push the wheel forwards, to remove the chain without getting out of order the chain tensioner (Pict. 10). Let the chain rest on the fork-end. Remove the brake cable end, pull the wheel out. When reassembling make sure that the nuts (round side) are against the chain tensioner. Don't forget to engage the anchor lug in the fixed point located on the fork-end.

Note: It is never necessary to remove the spring link.



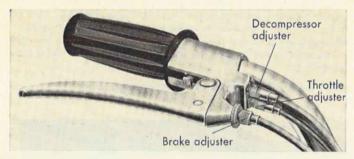
Pict. 10

CHAIN

The reinforced drive chain should be properly stretched; adjust it with a rider on the machine.

BRAKE ADJUSTEMENT

The adjustment is to be carried out from the handlebars (knurled nut and lock nut) (Pict. 11).

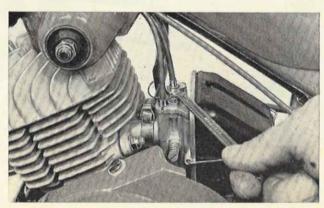


DECOMPRESSOR ADJUSTMENT

This adjustment is to be carried out from the handlebars (Pict, 11). The decompressor must open frankly (1 mm at the valve). The twist-grip should close entirely the throttle before the decompressor operates.

The decompressor control must have a free travel to ensure the closing of the valve. The contrary will cause the destruction of the valve, hence lost of power.

THROTTLE ADJUSTMENT

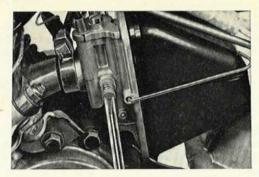


Pict. 12

Pict. 11

This adjustment is to be operated on the carburettor by means of the adjuster, for the SP 94 TT (spanner 8 mm, piet 12). For the 92, SP 93 and the 93 DL, the throttle adjustment is to be carried out from the handlebars (Pict. 11).

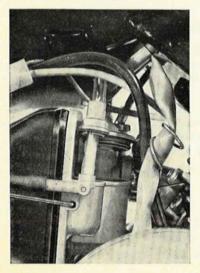
CARBURETTOR



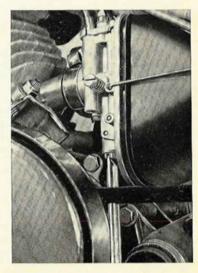
Pict. 13

The carburettor, properly adjusted, shall always provide a proper carburation. It has a silent air intake filter, and a choke, which insures correct starting under all temperature conditions.

On all carburettor, there is a idling adjustment screw, to be screwed on to accelerate the idling (Pict. 13), after having removed the left engine fairing. Note that the throttle control must have a free travel forbidding to open the throttle when turning the handlebars.



Pict. 14



Pict, 15

To clean the carburettor jet, remove the left hand engine fairing, and unscrew the jet with a screw-driver (Pict. 15).

The 92, SP 93, 93 DL and the SP 94 TT are supplied with a spare jet located inside the silent air intake filter, in a special housing, separated from the carburettor port. This jet must be fitted instead of the breaking-in jet after the first 500 km.

Since the breaking-in jet should not be re-used, do not replace it in the silent air intake filter, since it could, if incorrectly placed, be sucked into the engine and domage it.

The MOBYLETTE is equipped with two filters: a petrol tap filter and a carburettor filter. To take away the latter, remove the righ hand engine fairing (Pict, 14). Check the cleanliness of the filters after any repair or in case of lack of mixture.

SPARKING PLUG

We advise our customers to use the same type, make of plugs as those originally fitted on our machines. If the engine misfires, starts badly, remove the plug and clean it, checking the gap which should be 4/10° mm,

FLYWHEEL MAGNETO - IGNITION

The flywheel magneto provides ignition and lighting current. The ignition advance is 1.5 mm. The gap between contact points is 3 to 4/10° mm. The maintenance of the flywheel magneto should be carried out by one of our dealers.

The SP 94 TT is fitted an Electronic flywheel magneto based on the discharge of a condenser accross the primary winding of a ignition coil. This discharge is controlled by a thyristor, itself triggered by an electromagnetic pick up when passing a ridge set on the crankshaft.

On the 93 D, the ignition is ensured by battery-coil.

LIGHTING

Lighting is provided by the flywheel magneto. On the 93 DL, it is provided by the batteries. The switch is on the headlamp.

For the 92, 93, use in front a 6 V 15 W BA 15 D bulb at the rear a 6 V 1.8 W screw cap.

For the 93 D, use in the front and the rear à 6 V 6 W screw type bulb.

On the 93 DL, with turn signal lamps, use at the front a 6 V 6 W bulb; rear 6 V 7 W BA 15 S; turn signal lamps and stop 12 V 21 W; BA 15 S bulb.

The original bulbs are the only ones suitable with the lighting generators.

The electrical wirings and terminal tags should be checked and kept in good condition.

HORN

The 92, SP 93, 93 D and SP 94 TT are fitted with an electric horn, the 93 D horn operating from an battery.

To use your Wobylette all round the year...



AII

Mobylette

can be

equipped with

OUR LEGSHIELDS

THIS ACCESSORY IS SOLD AND FITTED AT EVERY DEALER'S

SUMMARY OF MAINTENANCE INSTRUCTIONS



- 500 km: change the jet. Drain relay-box.
- 1.500 km: breaking-in completed.

EVERY 1.000 km: lubricate with BP ENERGREASE C 3 G the telescopic front fork, and the pulley.

Lubricate at the same time the clutch and the automatic gear change with BP ENERGREASE C 3 G.

Clean the chain with a rag and lubricate with BP ENERGOL MOTOR OIL SAE 50.

Lubricate the speedometer drive with BP ENERGREASE C 3 G.

EVERY 2.000 km: check the oil level of the relay-box.

EVERY 4.000 km: drain the relay-box and fill-up with 85 cm³ of BP ENERGOL SAE 40.

EVERY 6.000 km : lubricate front and rear hubs with BP ENERGREASE L 2 Multipurpose.

Decarbonize the exhaust system.

Get the contact points gaps checked.

EVERY 12.000 km: proceed to a thorough decarbonizing.

Oil the cable inlets periodically.

MAINTENANCE SCHEDULE

OPERATIONS	Relay-box level	Draining of the relay-box capacity 85 cm³	Lubricate the telescopic front fork	Lubricate the chain	Lubricate the automatic clutch and the automatic gear change	Lubricate the hubs	
200 kms		0				Parina.	
1 000 kms		nii n	0	0	0		
	0		0	Ö	0		
3000 kms			0	0	0		
4000 kms		0	0	0	0		
2000 kms			0	0	0		
6000 kms	0		0	0	0	0	
7000 kms			0	0	0	- 100	
8000 kms		0	0	0	0		
8000 kms			0	0	0		
10.000 kms	0		0	0	0		
11.000 kms			0	0	0		
12.000 kms		0	0	0	0	0	

ROAD BREAKDOWNS

Serious break downs are extremely rare. However slight troubles may occur and the following indications may help you to repair them immediately:

I. THE ENGINE FAILS TO START

Two reasons: ignition or mixture inlet.

a) IGNITION

- Check if the spark plug is not fouled by oil. Clean with petrol and clear the electrodes with emery paper. Check the electrode gap which should be 4/10° mm.
 - Check if the high tension lead to the plug is not cut.

Check if the lead going to the external coil is not at the earth, or if the earth lead is not cut.

If the ignition still does not work, the flywheel magneto or radio suppressor is defective. See one of our dealer.

b) MIXTURE INLET

- Check the mixture flows properly to the carburettor by unscrewing the carburettor filter. Otherwise clean this filter and the petrol tap filter. Check that the air pressure vent is not clogged up.
- If the carburettor is working only with the choke, the main jet must be clogged up. If so, you should be able to ride for a few kilometers while operating the choke periodically.
- To clean the main jet, use the inflator. Be careful not to introduce any dust.

A jet just cleaned can be clogged up several times, if there is water or impurities in the carburettor.

— If the carburettor is flooded, it is likely due to some particle of dust preventing the needle valve to rest on its seat. Clean the whole and put in place again. If the needle valve is worn out, replace it.

II. THE ENGINE IS PULLING BADLY

a) IGNITION

- Check the spark plug.
- Have the flywheel magneto checked by one of our dealer.

b) CARBURETTOR

- The carburettor is not getting enough mixture (filter partly clogged up). This may cause a loss of power at high speed; clean filters.
- An engine working unevenly and jerking (4 stroke), there is either too much fuel, which should be reduced by fitting of a smaller jet, or an excess of carbon deposits at the exhaust. Consult one of our dealers.
- After the first 500 km don't forget to fit the spare jet instead of the running-in jet.

Otherwise, do not alter the carburettor adjustment unless absolutely necessity. Consult one of our dealers.

c) TRANSMISSION

Excessive chain tension may cause a lack of power. Remember that the chain tension should be adjused with a rider on the machine.



Your Mobylette will give you reliable service if you follow the instructions given in this OWNER'S GUIDE.

CONDITIONS OF GUARANTEE

- 1st Our machines are guaranteed for six months. The guarantee is strictly limited to the replacement or reconditioning, at our convenience, of the parts acknowledged by our Technical Department to be defective from the manufacturing or material defect point of view. This guarantee does not involve our liability in the event of accidents occuring to persons or things which may result from such defects.
- 2nd All labour expenses involving the disassembly, re-assembly and testing of the machine, as well as the maintenance and return carriage expenses remain chargeable to the customer. We do not on any account participate in the expenses and consequences resulting from the immobilisation of the machine.
- 3rd Any replacements and reconditioning, carried out under the terms of the guarantee, can on no account result in the extension of the guarantee.
- 4th Any machines converted, modified or repaired outside our workshop, or by a third party other than our Official Dealers or still with the use of non-genuine spare parts shall lose the benefit of the guarantee. The same applies if the maintenance instructions (lubrication, running-in, maintenance) mentioned in the Owner's Guides supplied with each machine, have not been followed. The guarantee is subject to the compliance with indications given concerning the mixture, as indicated in the present Owner's Guide.
- 5th With regard to the parts and accessories not manufactured by us (bearings, tyres, sparkplugs, batteries if fitted, etc.), the guarantee is confined to that of the relevant supplier.
- 6th Springs, bulbs, glasses and controls (cables and sheaths) are neither guaranteed nor replaced.
- 7th When sending parts or components to be replaced or repaired under the terms of the guarantee by our dealers, we must have the following details:
 - a) the machine's frame and engine serial numbers,
 - b) the date of first circulation,
 - c) the number of kilometers completed,
 - d) brand and characteristic of the oil used.

CONVERSION CHART

I. Conversion from kilometer to miles

1 kilometers: 0,62 miles
6 kilometers: 3,72 miles
500 kilometers: 310 miles
1,000 kilometers: 621 miles
1,500 kilometers: 932 miles
2,000 kilometers: 1,242 miles
4,000 kilometers: 2,485 miles
6,000 kilometers: 3,728 miles
12,000 kilometers: 7,452 miles

II. Conversion from millimeter to inches

4/10 of millimeter: 0.015 inch 1 millimeter: 0.039 inch 1.5 millimeter: 0.058 inch

III. Percentage, mixture ratio

5 per cent: 20.1

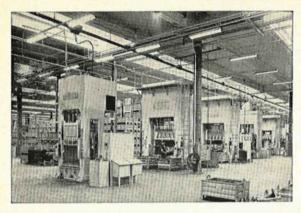
IV. Types pressure, conversion from kilogram to pound

1,500 kg: 22 lbs 1,800 kg: 26 lbs 2,200 kg: 31 lbs

NOTES

TABLE OF CONTENTS

	Page
Description	1
Riding as a bike	2
Operation	3
Driving	6
Mixture	7
Petrol-tap	7
Turn signal lamps - Stop light	8
Handlebars adjustment	8
Running-in	9
Maintenance - Lubrication	10
Relay-box	10
Telescopic front fork	10
Chain	10
Automatic gear change MOBYMATIC	11
Hubs - Miscellaneous	11
Decarbonizing	12
Battery (93 D)	12
Tyres	12
Punctures	13
Brake adjustment	14
Decompressor adjustment	14
Throttle adjustment	14
Carburettor	15
Sparking-plug	16
Flywheel magneto - Ignition	16
Lighting	16
Horn	17
Summary of maintenance instructions	19
Maintenance schedule	20
Road break downs	21
Conditions of guarantee	24
Conversion chart	25
Diagrams	29





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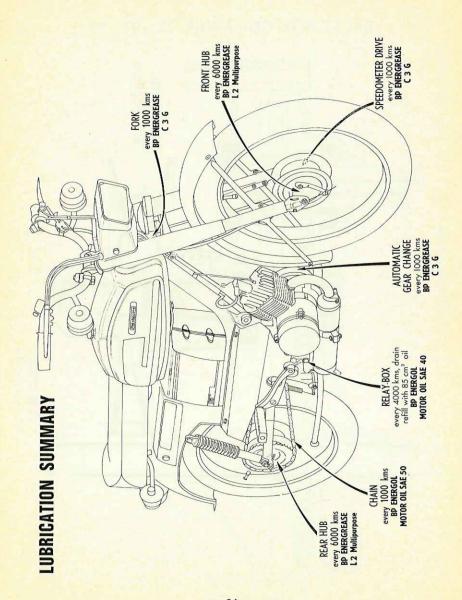
DIAGRAMS

VERY IMPORTANT

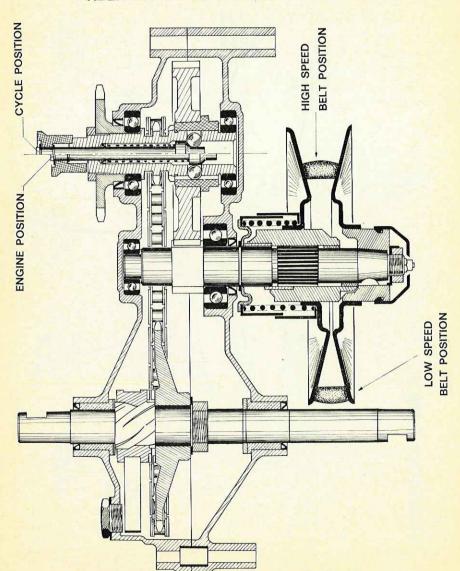
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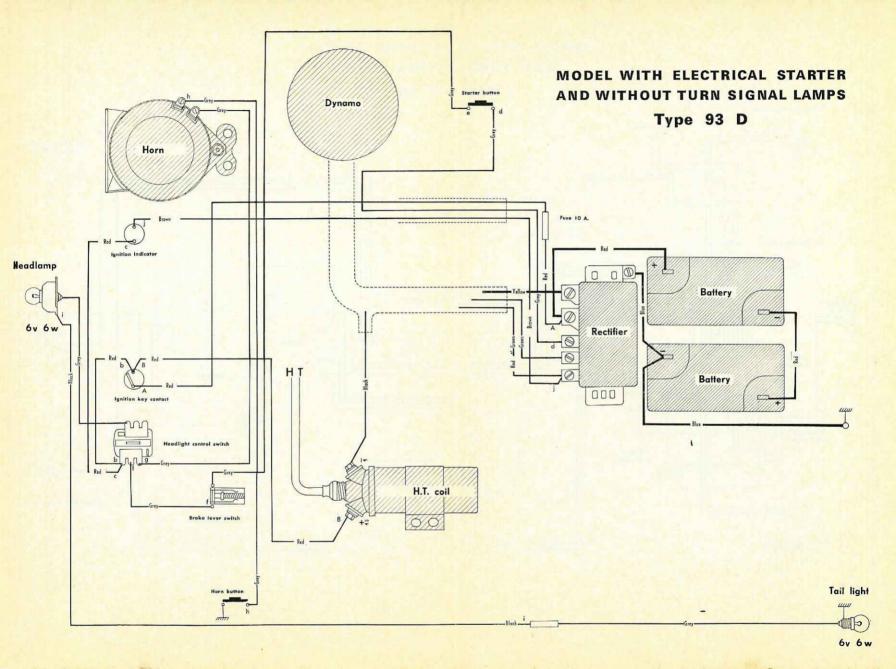
To get the most out of your Mobylette we recommend

BP-ZOOM



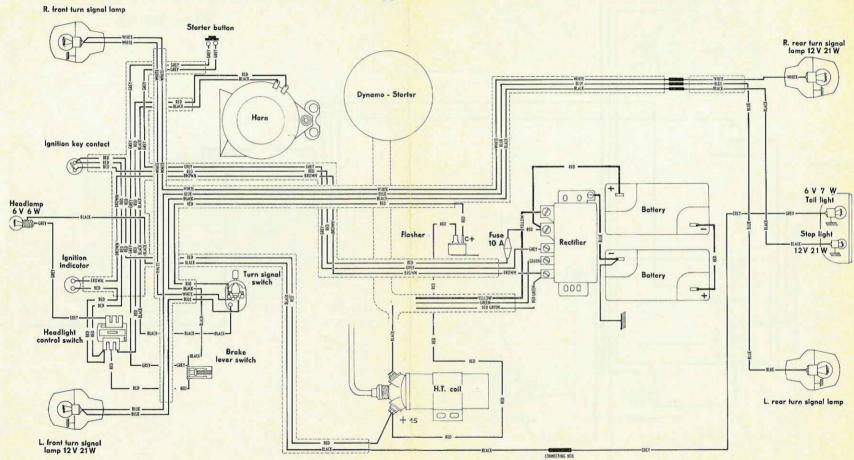
RELAY-BOX CUT-AWAY 92 - 93 - 94



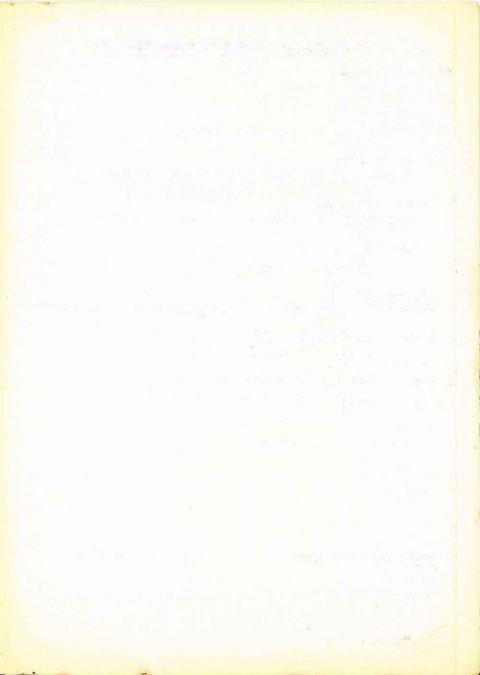


MODEL WITH ELECTRICAL STARTER AND TURN SIGNAL LAMPS

Type 93 DL



. 400



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