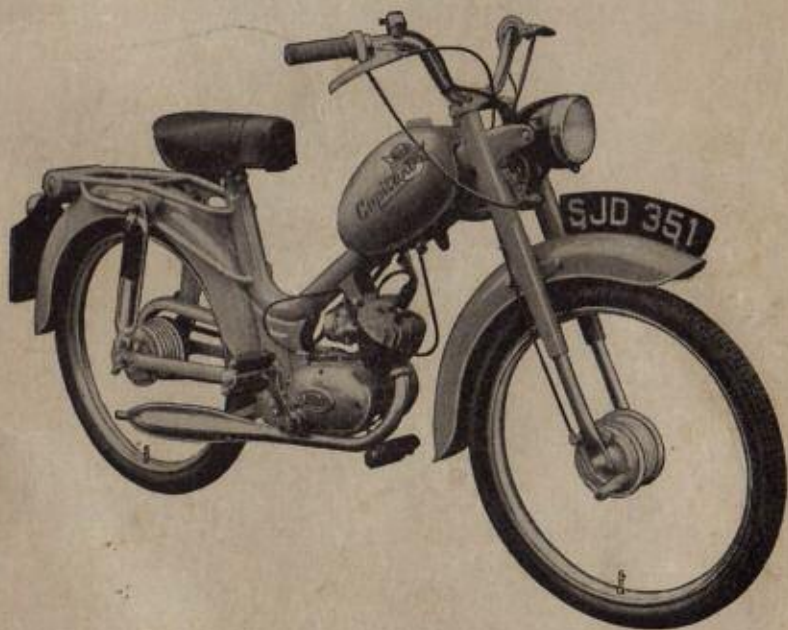


The



Capitano



RIDERS
HANDBOOK

Introduction

MANY Moped riders are not in the first instance technically minded, and it is therefore important that the few simple instructions in this book are carefully followed.

The KERRY CAPITANO MOPED is of Italian manufacture, and is a combination of their finest materials and craftsmanship, and will give you many thousands of miles carefree riding, being an easy machine to handle, and economical to run. Furthermore, the low riding position and efficient brakes give added safety both in traffic, and on the open road.

We would advise all riders to consult their Agent before carrying out any repairs other than normal running adjustments, and in all cases to insist that only Genuine Capitano Spares are used.

GENERAL DATA

ENGINE: Single cylinder two-stroke, air cooled, with two-speed gearbox.

BORE: 38 mm. STROKE: 42 mm.

CAPACITY: 47.6 c.c. COMPRESSION RATIO: 7 : 1.

PISTON: Aluminium slightly domed 2 ringed, long-skirted.

PISTON RING GAP: .005" minimum—.012" maximum.

CYLINDER BARREL: Special close grain iron.

LUBRICATION: Engine oil mist to piston and bearings etc. Gearbox: by S.A.E.40 oil.

CLUTCH: Multiplate with cork inserts.

SPARK PLUG GAP: .020" minimum—.025" maximum.

CONTACT BREAKER GAP: .012" minimum—.015" maximum.

IGNITION TIMING: $\frac{1}{8}$ " before top dead centre.

MAGNETO OUTPUT: 6 volt, 18 watts.

CARBURETTOR: Dell'Orto T.4.12.S1.

LIGHTING: Direct: Head Lamp 6 volt. 15 watts.
Tail Lamp 6 volt. 3 watts.

TYRES: 23" by 2.00". Pressure—Front 25 lbs. per sq. in.
Rear 36 lbs. per sq. in.

(The pressures given are based on the rider being 11 stone. Any carried weight greatly in excess of this would necessitate increased pressures.)

BRAKES: Full width internal expanding type:
Front: Hand lever operated.
Rear: Back pedal operated.

ENGINE LUBRICATION CHART

PETROL/OIL RATIO RECOMMENDATIONS

It is advisable to flush out the tank before filling for the first time, and important to see the petrol fuel is thoroughly mixed before turning on the petrol tap.

<i>Type of Oil</i>	<i>Running-in Period first 500 miles</i>	<i>Thereafter</i>
B.P. Zoom	1 : 16	1 : 20
Castrol XL	1 : 16	1 : 20
Castrol Two-Stroke	1 : 12	1 : 16
Essolube 30	1 : 16	1 : 20
Esso Two-Stroke	1 : 12	1 : 16
Mobiloil A	1 : 16	1 : 20
Mobil Mix TT	1 : 12	1 : 16
Shell 2T Mixture	1 : 16	1 : 20
Shell X100 30	1 : 16	1 : 20
Regent Motor 2T	1 : 16	1 : 20

The Readimix Petroil available from Dispensers on garage forecourts is in the ratio of 1 : 20 and *should not be used until the engine has completed 500 miles.*

NOTE: Half-a-pint of oil to one gallon of petrol is a RATIO of 1 : 16.
Also, half-a-pint = 10 fluid ozs.

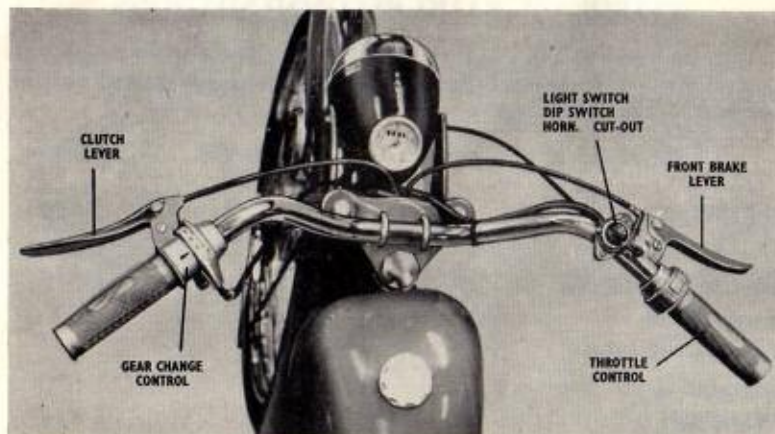
GEARCASE OIL RECOMMENDATIONS

B.P. ENERGOL 40	MOBIL OIL BB
CASTROL XXL	SHELL X100 40
REGENT: HAVOLINE 40	ESSO EXTRA: MOTOR OIL 40/50

Rear Shock Absorbers: REGENT HAVOLINE 20W

Rear Chain: REGENT 904 GREASE, every 3,000 miles.

CONTROLS



Sitting on the saddle, the controls of your Moped are located as follows:—

Clutch and Gear Change.

These two controls are combined on the left hand side of the handlebars. The gear change position should not be moved without first pulling in the clutch lever. The gear change positions are as follows:—

Bottom Gear (mkd. 1)—control turned away from rider.

Top Gear (mkd. 2)—control turned towards rider.

Neutral (mkd. 0)—position between top and bottom gear.

Front Brake.

This is the lever on right-hand side of handlebars.

Throttle.

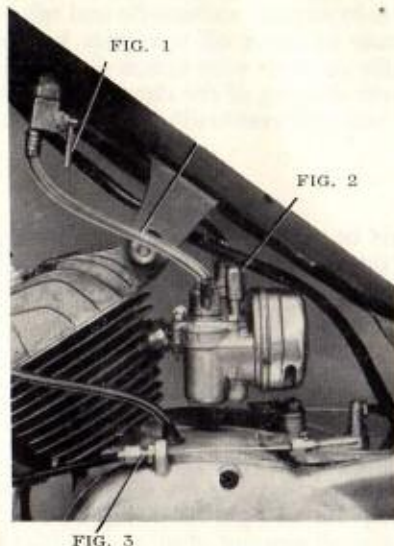
This also is on the right-hand side of handlebar. Turning the twistgrip control back towards the rider opens the throttle and increases engine speed.

Light Switch: Dip Switch: Horn Button: Cut-Out Button.

This is a combined control on the right-hand side of handlebars. The light switch lever has 3 positions—full or head beam, off and pilot. The horn button is located on top of the combined switch.

Rear Brake.

This is connected to the pedal crank and is operated by exerting a backward pressure on the pedals. After application of the rear brake it is necessary to move the pedals forward for approximately a quarter of a turn to release the brake before moving forward again.



Starting.

The petrol tap (Fig. 1) should be turned ON and the plunger (Fig. 2) on the left side of the carburettor depressed two or three times. This will allow additional petrol to flow into the carburettor and assist in starting the engine. You will find by experience the number of times it is necessary to depress the plunger.

The gear change control should be in the neutral position (0) and the pedal depressed sharply forward to start engine. If you require to turn the pedals to a suitable position for depressing it is only necessary to pull

in the clutch lever—this will then allow the pedals to be turned freely. **UNDER NO CIRCUMSTANCES SHOULD THE PEDALS BE KICKED BACKWARDS.**

When the engine has started it should be left running for a few moments to warm up. The clutch lever should then be pulled in and the gear change control turned to engage 1st (1) gear; the clutch lever should then be gradually released to engage clutch, at the same time accelerating the engine by opening the throttle slightly—the

machine will then move away without jar or jerk. When the machine has attained sufficient speed (about 12 m.p.h.) declutch, at the same time closing the throttle and changing to 2nd (2) gear position.

Riding at Low Speeds.

When you wish to travel at low speed DO NOT try and do so by keeping the machine in top gear and slipping the clutch. Always change to bottom gear for low speed riding, or when riding in traffic or up a steep hill. If you want to stop always pull in your clutch lever and turn gear change control to neutral position (0) and release clutch lever. When you are ready to move off re-engage bottom gear (1). DO NOT wait at traffic controls with clutch disengaged and engine in gear as this constant slipping of the clutch will cause undue wear of the clutch parts and will eventually result in clutch slip.

To Stop The Engine.

The gear change control should be turned to the neutral position and the cut-out button in the side of the light switch depressed. *ALWAYS TURN OFF THE PETROL WHEN NOT USING YOUR MOPED.*

OPERATING INSTRUCTIONS AND MAINTENANCE

Lubrication.

Before using your Moped it is essential that the oil level in the gear transmission case is checked by removing the oil level screw (Fig. 11) situated below the nameplate on right hand side of crank case. With this plug removed a small amount of oil should trickle from the level hole. If the oil level should require topping up, the crankcase breather (Fig. 7) should be unscrewed and the necessary amount of S.A.E. 40 oil poured in until the correct level has been reached and the excess oil flows from the level. Oil can also be poured into the crankcase by removing the two screws securing the nameplate (Fig. 10). If this method of filling is used care should be taken when refitting the plate to ensure the gasket is in place and screws fully tightened. The engine should then be started and run for a short period and an examination made for oil leaks.

Running In.

The purpose of running in an engine is to enable the various parts, i.e. Piston, cylinder, big end, little end, etc., to bed in perfectly, and thus attain a higher degree of finish than is obtainable during manufacture. It cannot be emphasised too strongly that the manner in which a Moped is ridden for the first 500 miles will have an important bearing on its performance during the rest of its life.

For the first 500 miles during the running in period, it is recommended that the Petrol/Oil mixture is used as indicated in the Petrol/Oil Mixture Chart. While you are running in your engine the following speeds should not be exceeded:

Bottom Gear	...	14 m.p.h.
Top Gear	... ..	23 m.p.h.

After running in mileage has been completed, engine speeds can gradually be increased and the Petrol/Oil mixture used as indicated in the second column of the Petrol/Oil mixture chart.

FIG. 4

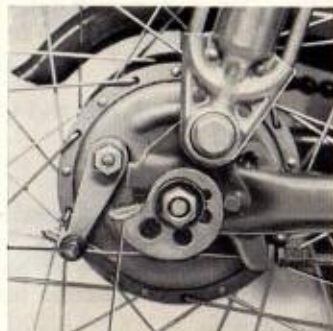


FIG. 5

FIG. 6

Brakes.

It is important to check brakes frequently. Your life and that of others may depend on the brakes being in 1st class condition. Attention to this point should not be delayed under any circumstances. Adjustment of the brakes is carried out by means of the adjuster (Figs. 4 and 5) located on brake plate of the respective wheels.

Tyre Pressure.

These pressures should be maintained at 25 lbs. Front, 36 lbs. Rear. Under-inflated tyres will cause damage to the wall of the tyre and can also result in uneven tread wear. Over-inflated tyres give an uncomfortable ride. These pressures are based on the rider being 11 stone. Any weight carried greatly in excess of this would necessitate increased pressures.

FIRST 500 MILES

Gearcase Oil.

The oil in the gearcase should be drained and refilled after 1st 500 miles. It should be drained again at 1,000 miles and subsequently changed every 2,500-3,000 miles. To drain gearcase oil it is recommended that the engine is run until it is warm which will allow the oil to flow freely. The Drain plug which is situated under the gearcase should then be removed. If crankcase breather (Fig. 7) is also removed this will assist the oil in draining away more rapidly. The gearcase should be refilled with 1 pint S.A.E. 40 oil as per instructions on page 3 for lubrication.

Spark Plug.

This should be cleaned and the points reset. The correct points setting is .020 in.—.025 in.

Magneto Breaker Points.

To inspect the contact breaker points it is necessary to remove left-hand side cover of engine by undoing the two securing screws. The magneto will then be visible and the flywheel should be turned in an anticlockwise direction until the resistance of compression is felt.

The contact breaker points will be seen through one of the inspection slots in the flywheel. The flywheel should then be moved backwards and forwards to find the maximum open position on the points and the gap checked. The correct points setting is .012"—.015".

If the contact points require adjusting the locking screw should be loosened slightly and the points moved to give the correct setting and the locking screw retightened. The gap should then be rechecked to ensure that the points have not moved when tightening the screw.

Do not use dirty or oily feeler gauges when checking points gap as this may cause excessive arcing of contact points. Always refit the cover plate before testing the engine.

Rear Chain.

The rear chain should be checked for adjustment by holding bottom section in the middle and moving up and down. When correctly adjusted this movement should be $\frac{1}{4}'' \times \frac{3}{4}''$ approximately. To adjust a slack rear chain the rear spindle nuts should be slackened off slightly and the adjuster plates (Fig. 6) turned forward until the chain has the correct amount of free movement. Before tightening the spindle nuts check that the rear wheel is square between the rear forks.

General.

A check should be made of all nuts, bolts and screws for tightness—all cables should be oiled at the control and operating ends.

1,000 MILE SERVICE

The gearcase oil should be drained and refilled as per instructions for 500 miles.

Rear Shock Absorbers.

The rear shock absorbers require a few drops of thin oil every 1,000 miles by removing the small plugs at the top and oiling with an oil can.

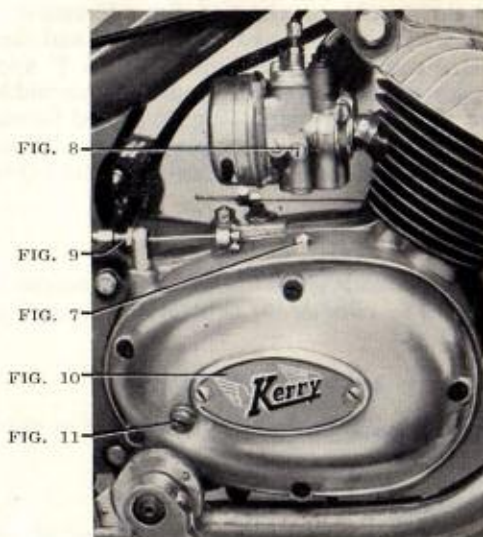
3,000 MILE SERVICE

The same service should be carried out every 3,000 miles as shown for first 500 mile service. It may be necessary to decarbonise the engine at 3,000 miles. An inspection by your Agent will tell you if this is necessary.

ADJUSTMENTS

Slow Running.

The speed of the engine is adjusted by the cable adjuster bolt fitted in the mixing chamber top of the carburettor.



Slow Running Mixture.

This can be adjusted by use of the mixture adjusting screw (Fig 8) located in the side of the carburettor body. The screw should be turned clockwise to weaken the mixture and anti-clockwise to richen.

Clutch Cable.

The adjuster (Fig. 3) for this is located on the top near side (left hand) of the crankcase and should be adjusted so that the clutch lever has $\frac{1}{2}$ " free movement at the extreme tip of the lever.

Gear Change.

The correct adjustment should be made so that the rear wheel spins freely with the gear control in the neutral (0) position. Two

adjusters are provided, one at the gear control end of the cable, the other is screwed into the crankcase (Fig. 9) directly in front of the rear engine mounting bolt. These adjusters should be screwed outward if bottom (1st) gear is not engaging correctly and screwed inward if the top gear is not engaging.

RECOMMENDED ACCESSORIES

To add to your riding enjoyment the following accessories are available from your local dealer:—

Huret T/23D Speedometer	...	...	...	Each	36s.	0d.
Patrol Leg Shields	...	...	...	Each	54s.	6d.
Patrol Windscreen	...	...	...	Each	58s.	0d.
Kerry combined Childseat and Basket Carrier	...	...	...	Each	39s.	6d.
Midland Pannier Bags	...	...	...	Pair	57s.	1d.

Sparking Plugs:

Champion L81	Each 5s. 0d.
Lodge CC14	Each 6s. 6d.
K.L.G. F70	Each 5s. 0d.

Bulbs:

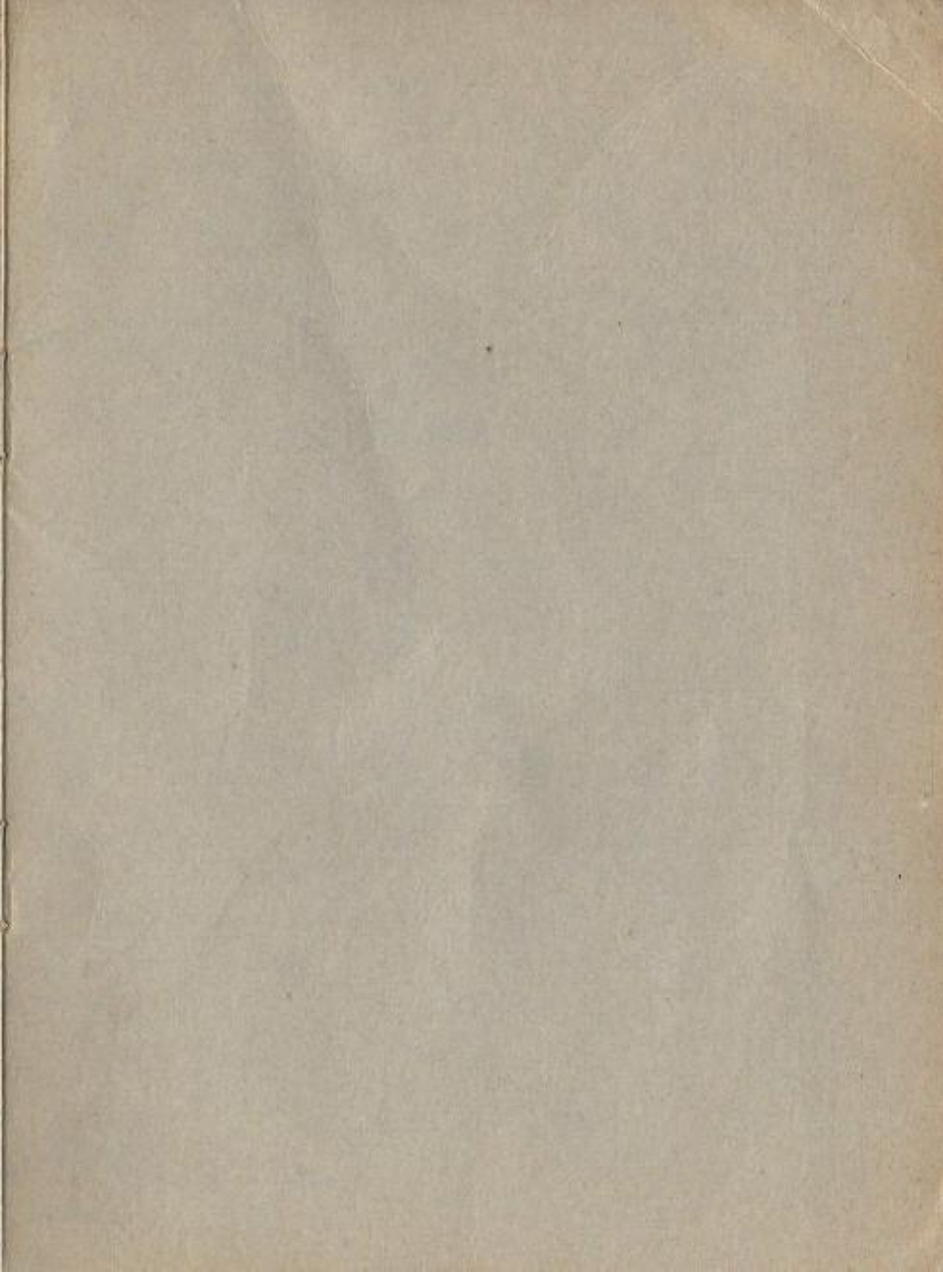
Head Lamp, Philips 6708 6v. 15-15W.	6s. 4½d.
Rear Lamp, Philips 255 6v. 3W.	2s. 7½d.

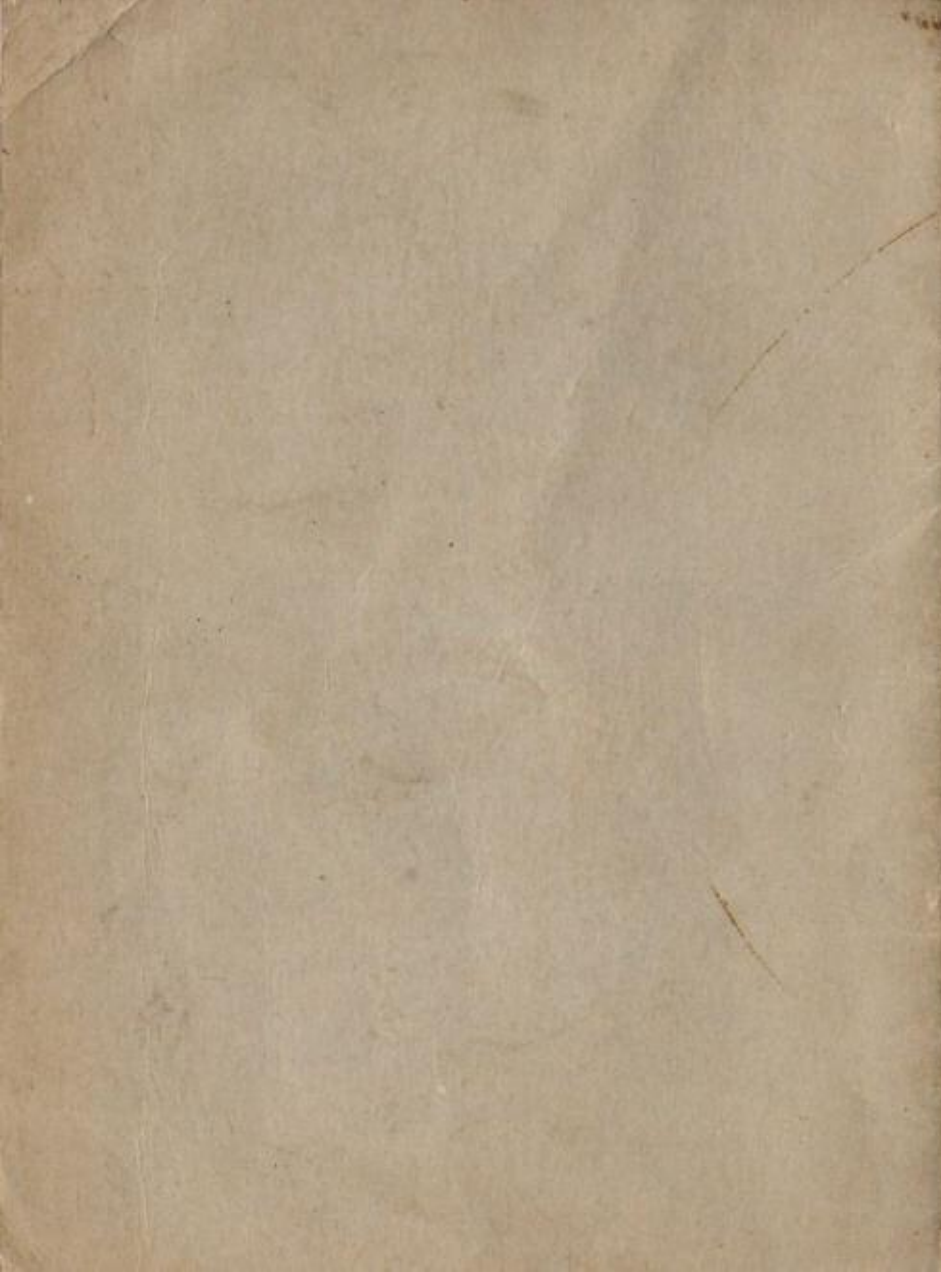
FAULT FINDING HINTS

In classifying below the more likely troubles under their respective headings it is well to remember the first suspect in all Two-Stroke faults must be the ignition system. Plug trouble can usually be identified by the slowing down of the engine, accompanied by a series of staccato bangs from the silencer, or rather a flat sounding bang being emitted from the carburettor, and can easily be remedied by cleaning or changing the plug, and checking the plug gap.

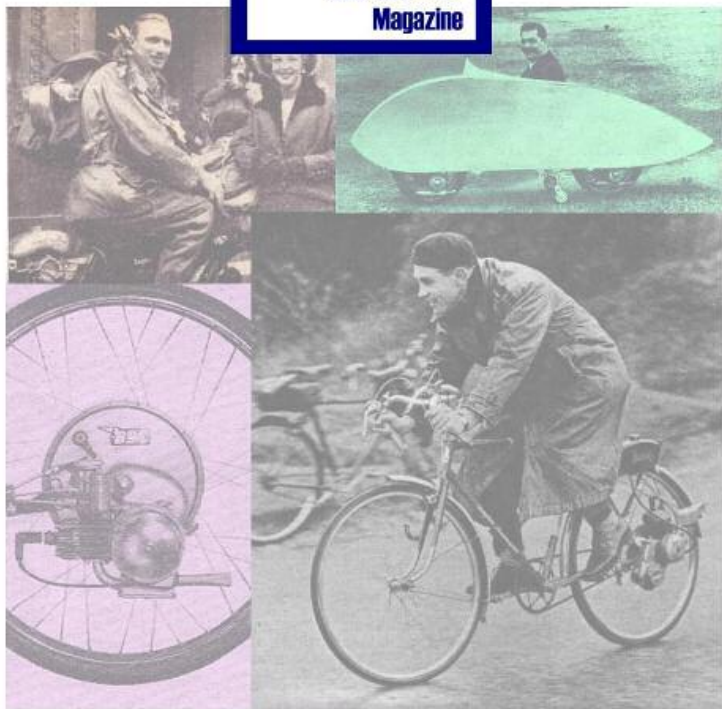
Engine will not start

<i>Fault</i>	<i>Remedy</i>
Fuel supply	Ensure that fuel is in the tank and that the petrol tap is open.
Petrol not entering float chamber or carburettor	Remove float chamber top and clean fuel entry hole.
Main jet of carburettor choked	Clean by blowing through jet.
If no spark	Check spark by holding spark plug against cylinder head. Clean plug and reset gap to $\cdot 020''$ – $\cdot 025''$. Fit new plug of the recommended type. Check magneto contact points and adjust if necessary. Set to $\cdot 012''$ – $\cdot 015''$. Cut-out button sticking. Condenser faulty—fit new one. H.T. coil faulty—fit new one.
Carburettor flooding	Strip down carburettor and examine float for perforations.
High petrol consumption	
	Examine float needle seatings. If worn—renew.
Uneven running	Clean and reset spark plug—check correct type of plug fitted.
Engine lacks power	
Spark plug dirty	Clean and adjust.
Carburettor jets dirty	Remove and clean.
Exhaust port choked with carbon	Decarbonise engine.
Silencer choked	Remove and thoroughly clean.
Loss of compression	Tighten cylinder head nuts—renew cylinder head gaskets if necessary.
Piston rings worn or sticking	Renew piston rings if necessary.





IceniCAM Information Service



www.icenicam.org.uk