

THE MODERN
ARIEL
MOTOR CYCLE

...

1929

**OWNERS'
GUIDE**

500 & 550c.c.

Price - ONE SHILLING

...

**ARIEL WORKS, LTD.
SELLY OAK, BIRMINGHAM**

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AGENTS.

ARIEL WORKS LTD.

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INTRODUCTION.

A careful study of this Guide will enable you to get the best results from your machine, with the minimum of trouble and expense.

Motor Cycling is one of the most fascinating of outdoor pastimes, for not only does it give one speedy access to the open country, and bring numerous places of interest within easy reach, but it offers ample opportunity for the display of skill, both in driving and management of the machine, in order to get the maximum amount of pleasure and utility at the lowest possible cost.

A certain amount of attention must be given to the machine to maintain its high standard of efficiency, otherwise much of the delight of Motor Cycling will be lost. Neglect to make the necessary adjustments, or only casual attention to the lubrication of important working parts, will soon neutralise the best efforts of those engineers who have devoted their skill and knowledge to the production of an ideal machine, and bring needless trouble and expense to its owner.

In the following pages of this publication we have given, in non-technical language, practical matter which has been compiled from carefully kept records extending over the past few years, and deals with every kind of query likely to arise.

We are, however, always pleased to give Ariel owners every assistance and advice on matters connected with their machines. When sending in your enquiry, please give us the following information:—

Model, *e.g.*, E. or F. (500 c.c., O.H.V.), or A. or B. (550 c.c., S.V.).

Year of manufacture.

Engine number and letter (stamped on near side of crankcase, just below cylinder).

Frame number and letter (stamped on off side of saddle lug).

It is quite useless to send the registration number of the motor cycle.

Taking over a New Machine.

First see that the seals on the tool bag and tyre pump are intact, and that any extras which may have been ordered are as specified. If necessary, unscrew the kick starter spindle and reverse, and fix foot-rests.

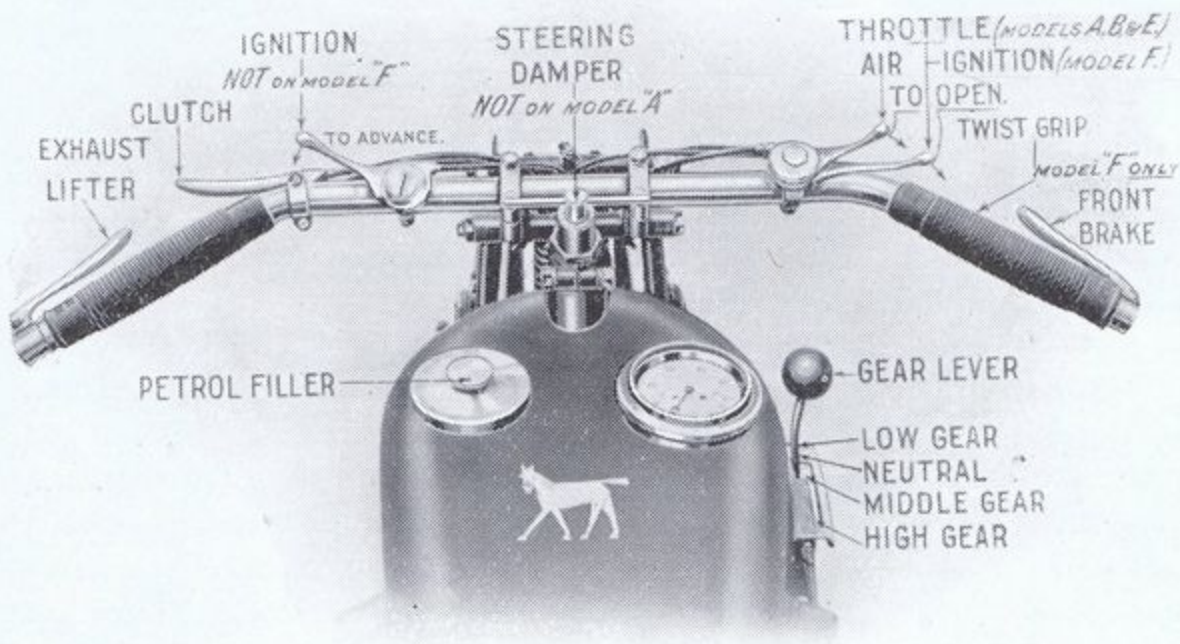


FIG. 1. THE CONTROLS.

Fill up the petrol and oil tanks (do not fill the oil tank above the level of the return pipe) and see that everything is in order. Having satisfied yourself on this point, it is essential to become familiar with the various controls, both as to position and direction of movement. The handlebar controls and gear lever are shown in Fig. 1 with notes. The gear lever quadrant is marked 1.N.2.3, the number 3 being nearest the rider. 1 signifies first or low gear, N. neutral or free engine position, 2 second or middle gear, and 3 third or top gear. The rear brake pedal is on the left-hand side, just by the footrest.

Instructions for Starting.

The engine will always start readily if the following instructions are followed:—**Turn on the Oil Tap.**

Set the ignition lever one-third advanced, slightly open the throttle—about one-eighth of the total movement of the lever—close the air lever and very slightly flood the carburetter by momentarily depressing the “tickler” in the lid of the float chamber. Depress the kick-starter until a big resistance is felt. Allow the kick-starter to return to the top of its travel. Hold up the exhaust valve lifter. Now depress the kick-starter sharply, dropping the valve lifter rather before the kick-starter crank is half-way down. If the engine has started, fully advance the ignition lever and open the air lever about half to three-quarters.

To check whether the oiling system is working satisfactorily, it is only necessary to remove the oil tank

filler cap, and see that oil is being pumped back from the engine into the tank. This will come through in bubbles and not in a continuous stream.

The Ariel lubrication system is entirely automatic in action, and so long as the oil tank is kept replenished it is practically impossible for any trouble to occur. Hence occasional inspection by removing the oil filler cap and observing that oil is being returned to the tank is all that is required.

As soon as the engine is warm—about half a minute—fully open the air.

If the engine has not started, have two or three more attempts, but do not flood the carburetter any more. Trouble in starting a new machine is more likely to be due to inexperience on the part of the rider than to there being any fault present.

If this is your first machine persevere for a few minutes before starting to locate the trouble.

Fault Finding.

If the engine still fails to start, it may be due to a dirty plug. Remove the sparking plug and see if the points are clean. They may be found covered with oil or carbon; carefully clean this off, and, if possible, dismantle the plug (see Sparking Plug) and clean the inside. Having re-assembled, connect the high tension wire to the plug terminal and place the plug on top of the cylinder or on top of the timing cover, being very careful that neither the terminal screw nor the metal connecting piece on the end of the H.T. wire—which has been connected to the plug terminal—are touching any part of the machine. Now operate the kick-starter and see if there is a spark at the points.

If there is now a good spark, and the points were previously dirty, the trouble has probably been cured, and so replace the plug and try again.

Should the engine still refuse to fire, undo the high tension wire from the plug, hold the metal end about $\frac{1}{8}$ in. from the cylinder—take hold of the rubber, NOT the metal itself—and operate the kick-starter. A good spark shows that the plug is at fault and must be dismantled, and properly cleaned (see Sparking Plug) or a new one fitted. No spark at all signifies magneto trouble (see Magneto) or a faulty H.T. Cable. This latter is most improbable on a new machine, but if faulty a spark will probably be seen jumping from the