

HINTS AND TIPS ON — SERVICE —

For **BSA** and **ARIEL** Dealers

Service Bulletin #75

November 16, 1959

BANTAM IGNITION TIMING

On All "D" Models With The Wico-Pacy System

When a Bantam engine is running badly or is difficult to start it may be that the Magneto Internal Timing is too early.

To check this when the engine is running badly try closing the contact point setting from .015" to .006". If this shows an improvement the fault is obviously incorrect Magneto Internal Timing.

To remedy this a Special Contact Breaker Cam is available which opens the points 5 degrees later than normal and therefore permits the contact point setting to be maintained at the specified .015".

The Special Cam may be ordered from our Parts Department in the usual manner. 1 - S0546 - Special Contact Breaker Cam. List price is \$1.24.

BSA INCORPORATED

Walter Brown

Walter Brown
Service Manager

WB:jcf

If there is no spark, or if engine still cannot be started, proceed to check ignition system as follows:

2. Check to be sure that the contact breaker gap is correctly set, the gap should be maintained at .014" - .016".

Check the condenser by substitution.

3. Place a piece of dry card between contact-breaker points. Disconnect the ignition feed from the harness, and using a 2 volt cell of 6v or 12v battery, with an ammeter in series, check the ignition coil primary for continuity. The primary winding has a resistance of approximately 0.5 ohms, the reading on the meter should not be more than 4 amps. An excessive reading indicates shorted turns while no reading will indicate open-circuit or earthen turns, in either event a replacement coil should be fitted.

If coil proves to be satisfactory proceed to check the alternator ignition coils as follows: Remove rotor and proceed with #4.

4. Connect the 2 volt battery and ammeter across the alternator ignition coil feed and earth (frame of machine). The resistance of coils is approximately 4 ohms and the meter reading should be approximately 0.5 amp.

An excessive reading indicates shorted turns while no reading will indicate open-circuit or earthen turns. In either event a replacement coil or stator is required.

NOTE: This test must be done as quickly as possible to avoid damage to coils through overheating and misleading readings due to increase in coil resistance with temperature rise. It will be found that 2 to 3 seconds duration gives ample time to observe the ammeter readings.

ON NO ACCOUNT SHOULD THIS TEST BE MADE WITH THE ROTOR IN POSITION, OTHERWISE PARTIAL DEMAGNETIZATION WILL RESULT.

If after carrying out the above tests the engine will not start even though the stator windings, ignition coil, etc., are satisfactory, remagnetize the rotor or check by substitution as it may have become partially demagnetized, resulting in a low output performance.

BSA INCORPORATED

Walter Brown
Walter Brown
Service Manager