

### Technical tips

The 'Ask Klaxon' section of Classic Motor Monthly of September 2014 contained a question on the lines of 'Whilst servicing my old car I noticed the rotor arm was loose on its shaft – will this throw-out the ignition timing'?

Klaxon's answer contained about a hundred mostly useful words but essentially said 'no' which of course is correct. However, I found it hard to believe that a 'technical expert' should say 'a little slackness in the fit of the rotor arm is nothing to worry about' even though he qualifies this by saying 'but it doesn't want to be a really sloppy fit'.

In my experience, any looseness in the fit of the rotor arm can radically affect the correct running of an engine, particularly at peak revs.

There is a designed air gap of between five and ten thou' between the rotor arm and the distributor cap segments to ...

- Accommodate any misalignment between the centerlines of the cap and the distributor body to prevent the rotor arm from touching and wearing the segments
- Accommodate wear in the distributor shaft bearings for the same reason
- Preserve an appropriate gap that amplifies the spark, giving a more intense spark at the plugs

On more than one occasion, I have found that a misfire at high rev's can eventually be traced to a loose fitting rotor arm that either causes the gap to increase or the arm to bear on the segments.

A loose fitting rotor arm can invariably be cured by fitting a steel shim to the distributor shaft, a shim of around three thou' should do. In the late fifties/early sixties Lucas recognized this possible problem and fitted a small spring clip inside the rotor arm to take-out any looseness that might develop in use.

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