**FINAL DISTRIBUTOR IGNITION TIMING SETTING MORRIS EIGHT 1934-38.**

**See also Basic Distributor Setting article**

Following on from the Basic Distributor Setting, you will now have an engine that runs. However it would now be worthwhile setting the Ignition Timing more accurately.
One useful way of doing this without any special tools except a feeler gauge is the way I do it (as described in Practical Motorist magazine dated 29/1/38.

- Set No1 piston (nearest radiator) to TDC as Item e) in 'Basic Distributor Setting' article
- Align cast arrow on block with pulley hole or groove as Item f) in 'Basic Distributor Setting' article
- Clean off paint and dirt from quadrant end of clamp plate and from cylinder head, to expose 'O' (or other datum) mark on cylinder head, and 'A' (advance) and 'R' (retard) marks and scale graduations on quadrant
- Set contact points to 0.010 to 0.012 inches
- Slacken distributor clamp bolt at base of distributor
- Slacken bolt securing quadrant end of clamp plate to cylinder head
- Move quadrant end of clamp plate so that its central mark is against 'O' (or other datum) mark on cylinder head
- Tighten bolt securing quadrant end of clamp plate to cylinder head
- Slowly and carefully turn distributor body clockwise about 10 degrees, then turn back anti-clockwise until a 0.002 inch feeler gauge can be inserted between the contact points
- Tighten the distributor clamp bolt at base of distributor
- This will give you the nominal setting
- Start the engine and prepare for a test drive
- Subsequent fine adjustment can then be made during road testing by slackening the quadrant bolt only and moving half of one graduation at a time. Do not slacken the clamp bolt

It is assumed that the distributor is in good condition, correctly maintained and lubricated, and without any undue slackness.

There are different ways of doing the road test adjustment, but as a rule you need to have a fully warm engine, to run the car at 30-35mph in top gear and then to try to accelerate quite hard on a slight incline. Advance the distributor half of one graduation at a time until the engine just starts to 'pink' in these conditions, then retard it half of one graduation at a time until 'pinking' ceases.

I am often asked 'which way round' the distributor fits in the engine. I set mine so that the oiler is on the carburetter side (so that I can oil it along with other lubrication that I do from that side) and with the flat part of the distributor cap on the same side. You can however fit it how you wish, all that matters is that you can get at it, and that the HT leads are fitted anticlockwise 1-3-4-2. There all sorts of assembly items that effect the position on the engine, including the two possible positions of the Bakelite base plate, the two possible positions of the distributor dog if it has been removed from the shaft for dismantling, and which cap terminal you connect No1 HT leads when beginning the sequence.

There is an advantage in using a stroboscope instead of my manual method, in that it gives you information on distributor wear and malfunctioning as it will show up 'scatter' as it is used, and also allows for normal slack in the distributor drive. However the disadvantage is that on a Morris 8 it is difficult to 'highlight' the marks on the block and pulley with tippex, and is also extremely difficult to aim the stroboscope. Try it and you will see!

I recently overhauled my distributor. I found worn bushes, but an unworn shaft. I replaced the bob-weight springs (Lucas Part No 404455) and bushes. I found that in use, the distributor body to cylinder head joint area receives enough oil to prevent corrosion. It appears that the lower bush receives oil in decent quantities from the tappet chest, whilst the top bush requires separate lubrication via the oiler. It reminded me to oil this top bush regularly and to remove the Bakelite baseplate regularly to oil the bob-weights and springs.

**Note**

Distributors on these cars are notorious for seizing in the cylinder head rendering adjustment and removal extremely difficult. This is caused by corrosion and debris in what is already a tightish interference fit between distributor body and cylinder head. It would therefore be a good idea to remove the distributor each year when servicing the car, apply some copper-ease or some other lubricant, and replace. By careful marking of the position of the distributor body in relation to the clamp plate and cylinder head, this could be done without disturbing the ignition timing.

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