

## Lagondaforum: LG6 LG45 valve / ignition timing marks

### LG6 LG45 valve / ignition timing marks

*Written by h14 at Aug 13, 2016 11:31 am*

When I last had the LG6 on the road, I couldn't find the flywheel marks as shown in the handbook illustration. So I followed the LG6 handbook instructions, measured 14.5mm from TDC and painted a mark for IVO (No 1 inlet valve opens) for the stated 5 degree setting.

This time round, I used some solvent on a rag to see if the factory marks were there or not. They were! So far I've found TDC and IVO clear, but only lightly stamped, but the "M" for magneto point opening still eludes.

Now...their IVO mark is disappointingly not very close to my 5 degree mark. Smelling a rat, I found my 1940 set of "Newnes Motor Overhaul & Repair", recalling the set included a data sheet for Lagondas. What do I find?

LG45 and LG6: "Inlet opens 7 degrees (btcd)". So, the handbook is clearly wrong, as is the Club workshop manual. Arnold Davey's book states "Sanction 4 (as Sanction 3 except for minor timing change)", so there is evidence of this change, although the data sheet states 7 degrees for 1936 and 1937 LG45 as well as LG6.

It doesn't end there. If 14.5mm from TDC is 5 degrees, 7 degrees would be 20.3mm. Is my IVO line there? No! It's at 24.5mm, which means my IVO setting would be around 8.5 degrees btcd.

The engine is one of the very last LG6 engines built: number 515 (the last (known existing) is 520). So, was there a further change to the valve timing of late LG6 engines?

These marks on the flywheel are accessed via an oval cover plate. On my engine, a very clear line has been stamped on the aluminium underneath, logically as an indicator to line up the timing marks. This line is not at the mid point of the round aperture, but about 7mm nearer to the NS (left side) of the car. At first I assumed this was perhaps because the hole was offset from the centre line of the crankshaft. Now I've seen Meadows engine drawings, they show the aperture is indeed on the crank centre line. The data sheet does state the indicator is "Pointer on clutch housing", which presumably means this stamped line. Any observations?!

Laurence

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### Re: LG6 LG45 valve / ignition timing marks

*Written by h14 at Sep 01, 2016 10:32 am*

Thought I'd read through the factory handbook thoroughly. Now I see it states that the flywheel pictured on page 28 has an IVO marking at 5 degrees. It comes down to semantics. One would infer that that is correct for the LG6 one has just bought...but no, it really does mean those are the marks shown in the picture!

Hidden in the text a couple of paragraphs lower, it actually states that IVO is in fact 8 degrees. Relieved as that is close to my estimate for my flywheel markings. I've now reset my tappets which brings openings closer to that setting. But I daresay I'm not the only one to have altered their camshaft sprocket setting to the 5 degree setting. Having last driven the car 16 years ago and only just got it back on the road, I'm not inclined to engage in the major dismantling involved in resetting it...especially as I will probably have major work done on the engine sooner rather than later.

This still leaves the mystery of the offset from centre line clearly scribed/stamped on the side of the hole for viewing the timing marks. This is surely intended as a timing mark, so why is it not central, in line with the crankshaft?

Laurence