

## Lagondaforum: LG6 rear axle oil (same as LG45?)

### LG6 rear axle oil (same as LG45?)

*Written by h14 at Aug 06, 2015 9:53 am*

I wonder what the current thinking on appropriate oil to use is. I'm trying to get my LG6 back on the road for the AGM. Yesterday I spotted a drip from the rear axle drain plug, which turned out to be 2 or 3 turns loose. The axle was rebuilt and re-installed in the car by a well known Lagonda specialist about 7 years ago, so I hope that is the only oversight he committed! I doubt there's any oil in the axle now, just as well I checked.

Anyway, the club issued "Revised (1998) Handbook" states use SAE120. I thought the usual options are 80, 90 and 140 but guess one can mix appropriately. Strangely, the original handbook recommends hypoid oils; yet the axle is spiral bevel, not hypoid.

So, what are people using today? I use a synthetic 90 grade oil in my Peugeot CTi, which is not thick and gloopy but quite runny. This seems to work very well. Presumably its thinner consistency enables better lubrication of bearings and reaches places thicker oil might struggle to. The star gears and pins had to be renewed on this axle precisely because lubrication to them is poor. Less drag as well. Any thoughts?! To clarify, I mean synthetic (not 90), presumably I'd use or mix a synthetic 120 grade for the LG6.

Laurence

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### Re: LG6 rear axle oil (same as LG45?)

*Written by Peter S30 at Aug 06, 2015 6:03 pm*

Hi Laurence,

I am using Millers Classic EP 140 in both 2ltr and V12 rear axle.

David Hine says EP 140 in his "Revised Hand Book V12 and LG6 (chassis only).

In the "Trader" Service Data sheet No. 73, September 13, 1939 you find e.g. "Shell Hypoid" (no further specification) or Essoleum Expee Compound 160 for summer and 110 for winter. I assume any classic hypoid oil is better than more modern stuff.

good luck for the trip to the AGM!

Peter

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### Re: LG6 rear axle oil (same as LG45?)

*Written by h14 at Aug 08, 2015 11:54 am*

Hi Peter,

I've since found Morris Lodexol 80W-140, it's a semi-synthetic, not full synthetic. Multigrade and would appear ideal. I'm not convinced that a thick oil is doing any favours to this axle, viz my comment regarding the star wheel and pin wear because of inadequate lubrication.

Incidentally, whilst the chassis is largely identical, Lagonda used their own rear axle for the LG6, and the 120 David Hine recommendation comes from his "Revised Hand Book for 4.5 Litre M45 R & LG45 models & LG6 (Engine only)"..but it does include the ENV rear axle...it says so in the V12 manual, but no reference to LG6 in the 4.5 litre manual...but obviously it is that axle.

Still hoping to take the LG6 to the AGM, just hope there aren't many more unexpected issues to deal with!

Laurence

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#### Attachments:

[morris semisynthetic gear oils.pdf](#) (filesize: 54.24 KB)

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### Re: LG6 rear axle oil (same as LG45?)

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*Written by bruffsup at Aug 09, 2015 2:26 am*

i have been using this stuff for about 40 years in a quick change racing differential ( Frankland) and various other motorcycle and auto gearboxes and diffs. Seems to work well. I will definitely be using it in the M45.

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### Attachments:

[MOLYSLIP.jpg](#) (filesize: 101.49 KB)

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### Re: LG6 rear axle oil (same as LG45?)

*Written by bill at Aug 09, 2015 9:41 am*

I have used Penrite "Mild EP" for some years in both an M45 and now an LG45 axle. The blurb says it is 110 SAE.

Does any one have any experience (good or bad) with this ?

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### Re: LG6 rear axle oil (same as LG45?)

*Written by h14 at Aug 10, 2015 5:56 pm*

I spoke with Castrol's technical department today. They thought their Syntrax 75W-140 would be best, given motorway use and longer journeys (more heat in the axle), but if shorter journeys the norm, Syntrax 75W-90. Both oils are full synthetics, but one big proviso is that the 75W-140 is aggressive to "yellow metals". I don't think the LG6 rear axle contains any brass or bronze components, except perhaps drain and level plugs; as non-moving parts, would they be affected?

Laurence

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### Re: LG6 rear axle oil (same as LG45?)

*Written by bill at Aug 10, 2015 6:02 pm*

I understood that the LG45 axle did in fact contain "yellow metals" and that is why the Penrite "mild EP" (or similar) should be used and not a more modern oil.

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### Re: LG6 rear axle oil (same as LG45?)

*Written by h14 at Aug 10, 2015 7:18 pm*

Groan! It's not easy this, is it!

So...anyone know, categorically, whether there are or aren't, yellow metal parts in the LG45/LG6 rear axle?!

Expecting the axle to be empty (given that the drain plug was 2 or 3 turns undone), I removed the plug...and the axle was full of oil after all. Of course if I hadn't checked, it would have been empty! Still want to use a multigrade/thinner oil, if I can find something suitable and safe to use

Laurence

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### Re: LG6 rear axle oil (same as LG45?)

*Written by bill at Aug 11, 2015 9:01 am*

Most older ball/roller bearings I believe have "retainer rings" which are in brass or similar yellow metal. These are the things which space the ball/rollers apart. There are quite a few of these bearings inside the rear axle !

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### Re: LG6 rear axle oil (same as LG45?)

*Written by h14 at Aug 11, 2015 9:47 am*

## **Lagondaforum: LG6 rear axle oil (same as LG45?)**

Doh! Yes, should have thought of that. The bearings should all be new, but that doesn't mean they won't have brass cages.

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