

Lagondaforum: Troublesome leaf springs

Troublesome leaf springs

Written by davidbracey at Mar 06, 2016 9:50 am

My car (saloon LG45) has developed a sagging RH rear. I realise that this is a heavy car and that the RH side has more load than the left (driver and spare wheel) but I want to get the car to sit evenly. I have also been running with a full fuel tank because I don't trust the gauge so there is another 75kg at the back - albeit evenly spread from left to right.

A sticking damper isn't causing it because it doesn't improve when I remove them.

Having removed the springs there is about 10mm difference in the set curve but it sits about 35mm low on that corner. I've had the springs sent to Jones for them to compare the load resistance and to put about 25mm more set onto the offending side.

Has anyone got any other thoughts or ideas? Been there before?

David

Re: Troublesome leaf springs

Written by bill at Mar 06, 2016 10:44 am

In my experience springs will always settle after a car is first rebuilt. Why not swap the springs over from side to side and see how this affects the height of the car. The 10mm/35mm difference could be affected by the front of the car of course. Have you checked the front springs as well ? Maybe the LH front is set too high ?

I assume that the chassis was checked for twist/triangulation etc before rebuild. Sorry if this is stating the "bleeding obvious" !

Re: Troublesome leaf springs

Written by h14 at Mar 06, 2016 11:58 am

If the springs have been removed and found to measure different curvatures, that indicates that it is indeed a problem with those springs.

I had new springs made for my LG6 by Paddington Springs; they did a great job, but despite a number of attempts, they never did get the "set" right for my car. To be fair, it is a special, hence the car is much lighter, furthermore as the chassis has been shortened, the springs are shorter.

A long way round in stating that this meant Paddington had no standard to work to; they reset my V12 and Riley RMB springs perfectly.

I took the LG6 springs to Jones Springs, where I expected many technical questions. Instead, he simply asked what difference in ride height I wanted. Not very reassuring...but they got it right!

Rather strange that one spring should sag and not its pair. Perhaps one has been replaced previously. Frankly, especially with both off, I'd ask Jones to reset both of them, having checked they have Lagonda standard spring settings available, and they should have. Or at least ask their advice...if they state the good one is fine, I'd accept that opinion.

Laurence

Re: Troublesome leaf springs

Written by Mark at Mar 06, 2016 2:46 pm

When I first purchased my LG45 I had exactly the same problem. Jones Springs reset all four springs but to no avail. They then reset the rears again and added an extra leaf. This gave some improvement but still a slight list. About 4 years ago I had the rear springs completely remade and included that extra leaf. I still have that slight list but interestingly when driving and being followed by a few well known Lagonda Club members, I am assured that the car does not show any list!

Sorry to say no answers just empathising.

Regards

Mark (Y2)

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Re: Troublesome leaf springs

Written by davidbracey at Mar 06, 2016 5:16 pm

Thanks to everyone that has contributed to this. It seems as if Lagonda leaf springs are as much of a black art as everything else Lagonda related. It is such a lot of work to keep removing springs and trying things out and my engineering brain doesn't like trial and error. I like to understand a problem then find a solution. All very frustrating but at least I am glad that I didn't either work at Lagonda in the 1930's or be a customer of theirs. I suspect I would have ended up killing someone!

Re: Troublesome leaf springs

Written by bruffsup at Mar 07, 2016 3:07 pm

I empathize with and anticipate similar problems. This topic is very discouraging especially for me in the hinterlands. The specifications for M45 springs must have existed somewhere at some time. A local old timer gave me a crash course in re-setting leaves with a hammer and anvil but the task proved too arduous for me and I gave up. I have heard of a shop in Detroit that specializes in vintage car leaf spring rebuilds. I may be heading there.

Re: Troublesome leaf springs

Written by davidbracey at Mar 16, 2016 2:58 pm

As it's now Spring... I thought I should provide a brief update on my springs. (Sorry..)

All 4 spring sets have been cleaned up and load tested by Jones and the results are interesting: -

LH Rear 240lbs

RH Rear 200lbs

LH Front 360lbs

RH Front 280lbs

Hardly surprising we had a lopsided car!

With the car on stands we can also see that the body is slightly unlevel on the chassis so I have decided to have the springs back as they are and refit them on the opposite sides. That must improve things but if not then we will start to swap leaves about and try and get them evened up. I'm not resetting the body on the chassis!

Re: Troublesome leaf springs

Written by bill at Mar 16, 2016 7:35 pm

David, glad to know that there was an obvious reason !

Apart from swapping from side to side why not also put in a steel block/spacer - if necessary only on one side to get the car to sit level. I did this on my LG45 (although on both sides) at the rear after Jones reset my springs. I then took the spacers (about 15mm) out after some mileage when the springs had "settled".

Re: Troublesome leaf springs

Written by h14 at Mar 16, 2016 8:35 pm

I don't know when they were introduced, but my V12 has thin oblong aluminium spacers with a hole in the middle to clear the central spring bolt. So by that means they must have fine tuned to ensure the wheels / tyres fitted the rear wing aperture correctly each side. Perhaps they had trouble with springs not matching?!

Laurence

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Re: Troublesome leaf springs

Written by davidbracey at Mar 16, 2016 9:52 pm

Bill, I'm not sure how the spacers would work. The springs fit below the axle so spacers would lower the car even further. Could you explain?
