

# Lagondaforum: LG45 steering shake

## LG45 steering shake

*Written by davidbracey at Apr 28, 2015 12:50 pm*

I've now covered 750 miles on my rebuilt engine and all is good. It feels and sounds strong so without tempting fate I am reasonably assured. I do have one slight issue however and would appreciate any thoughts and advice.

Twice now I've experienced a rather unnerving steering shake – what we motorcyclists would call a 'proper tank slapper.' The first time was after about 400 miles and the second after 730 miles. In between it has been absolutely fine. The circumstances were similar so I think this suggests a basic set-up problem rather than anything broken or loose but perhaps I just can't find something wrong.

Both times I was in a second gear navigating my way at less than 15mph through a narrow lane and steering about 30° right. It was slightly uphill after a downhill section so the weight of the car would have been on the off-side front with me turning right. The steering wheel shook violently from side to side and the whole car shook until I straightened and slowed to almost a stop. After that it was fine but it was very disconcerting. Heather was terrified!

All the wheels are centred and tight. The steering box bracket isn't cracked. Track rods all seem tight. I haven't had the wheels balanced but don't anticipate this being a problem at such low speeds. I daresay it's hard to balance the wheels with the wheel discs and locking rings on in any case.

I wonder if the set up needs toe in or out or whether there was some sort of harmonic vibration caused by the shocking uneven roads. Have you anything to suggest? Another member I have spoken with says that this is not an uncommon problem and that many people claim to have solved it with wedges or spacers on the suspension but it sounds a bit unlikely to me. As with all intermittent problems that are hard to replicate I suspect you can convince yourself that you've solved a problem and then find that in 6 months you haven't.

David

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## Re: LG45 steering shake

*Written by DavidLG45 at Apr 28, 2015 3:18 pm*

Hi David

Wedges change the castor angle and are sold by the club\*. If you have had the leaf springs re-tempered you may well need to adjust the castor angle. There are a couple of threads on this forum. Search for axle wedges and castor angle. (\* I think I am mistaken. You can get them from LMB Racing in Belgium though).

There are also lead weights in the curly end bits of the front bumper. Not sure what the theory is for having those - perhaps someone can enlighten us?

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## Re: LG45 steering shake

*Written by h14 at Apr 28, 2015 6:39 pm*

Had alarming shaking at anything above 40mph with my LG6 as first bought. The previous owner had gone through all the technical stuff...but strangely hadn't noticed that the OSF wheel had been rebuilt out of round! Being a special, you could see it as you drove. Took one of the V12's wheels with me when I went to collect the car...problem solved.

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## Re: LG45 steering shake

*Written by bill at Apr 30, 2015 10:03 am*

Had the same on my 3 litre years ago but only happened at slowish speeds ie 20mph.

Check camber and castor and also toe in /out very, very carefully.

There was an article some years ago in the magazine about this and I seem to remember that it was solved by having toe OUT instead of toe in. However this seem odd to me as, on the face of it, this would make the car wander at speed.

Part of the problem seems to be that the axle alters in "shape" over the years I believe (constant banging up and down of the axle over the years or by accident damage) ie you can "lose" (or gain) camber and/or castor angles. The castor angle can be altered by putting in the wedges referred to but

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you could still have the wrong camber angle.

If castor/ camber is new to you find yourself a Dunlop CG3 castor/camber angle gauge (much nicer to use than a CG4 gauge) in a nice wooden box and all should become clear !

Also find the article in the magazine as it is interesting.

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### Re: LG45 steering shake

*Written by bill at Apr 30, 2015 10:07 am*

Also I think the lead weights in the front bumper referred to by David above were another way of affecting the vibration when it occurred. Therefore it was a way of "damping" the vibration. However do not rely on that to solve the problem !

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### Re: LG45 steering shake

*Written by bill at Apr 30, 2015 6:34 pm*

David, I know from experience how terrifying the dreaded shimmy can be so I felt obliged to find the article that I referred to above.

Eventually I found it. I thought it was only a few years ago but it turned out to be 13 years !

The topic was referred to initially by Roger Firth in the Magazine for Summer 2002 (page 6). He suggested that toe out would solve it.

There was then a very interesting article by David Hine in the Autumn 2002 Magazine (page 36). There were also 2 letters in the "Letters section" which are interesting (page 41).

I hope all this helps you solve the problem and ,if you do, perhaps you would write it up in the forum to help others ?

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### Re: LG45 steering shake

*Written by davidbracey at Apr 30, 2015 10:38 pm*

Thank you everyone for your very helpful comments and suggestions. Lots for me to try out and experiment with when I get time.

Bill, that is very kind of you to have gone to the trouble of looking out old articles. Unfortunately, I don't have any of those so will try and track them down.

I will let you know how I get on.

David

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### Re: LG45 steering shake

*Written by DavidLG45 at May 01, 2015 8:46 am*

Hi David,

I should have the magazines mentioned. I will look them out over the weekend.

David

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### Re: LG45 steering shake

*Written by davidbracey at May 01, 2015 7:00 pm*

Thank you David.

I love this club, it's fantastic how everyone helps each other.

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