

# Lagondaforum: variable damping suspension

## variable damping suspension

*Written by Peter S30 at Jan 15, 2010 10:46 am*

Stephen mentioned his fun restoring the jackall system (in his post about the LG45 "Rapide" at Retromobile) and the variable damping suspension on his LG45.

On my V12 I also restored the jackall system and can confirm it is worth it. But my rear dampers are still non adjustable. At some point of the cars history they must have been exchanged to ones without an adjustment lever on it. The mechanism from the steering wheel to the actuating rod under the car is still there.

My questions: are the adjustable rear hydraulic shockabsorbers available (where, price..) and how is the experience with it, do you feel a real difference when changing from soft to hard?

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## Re: variable damping suspension

*Written by DavidLG45 at Jan 15, 2010 12:12 pm*

Peter, which type should they be for your V12? If they are the round Luvax ones (type ALCR) as on the later LG45s then your chances of finding some are slim. If you know the type you want try Stevson Motors <http://www.stevsonmotors.co.uk/home.htm>

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## Re: variable damping suspension

*Written by Colin M34 at Jan 16, 2010 11:22 pm*

Hi folks,

"Luvax" variable hydraulic shock absorbers are pretty scarce! They work by having a variable "spill valve" which allows different settings to be had from "hard" (low spill rate) to "soft" (high spill rate). I wonder if non-adjustable Luvaxes have the same internals and perhaps can be converted. I looked at the Stevson Motors website and was impressed that they still knew about them. I think they would be my first port of call.

My M45 has "Telecontrols" which are friction rather than hydraulic shocks. These work by allowing the driver to tighten up or loosen the friction dampers according to road conditions.

Those of you who studied engineering will be familiar with the benefits of hydraulic rather than friction damping which is why most car makers went over to hydraulic shocks in the mid 1930s. Citroen went over to the wonderful full hydraulic suspension about the same time, a very radical move.

If you see Luvaxes for sale at an auto jumble - buy them!

Colin M34

PS The club has lots of Jackall rams in the ex-Leo hoard. I had to sort them all out - a filthy job!

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## Re: variable damping suspension

*Written by M70 at Jan 17, 2010 10:52 pm*

I can confirm that Stevsons are about the only known source of our sort of Luvax (ALCR) and they do come in fixed (M45R, LG45 Rapide) and variable(LG45) types. Although I don't think Stevsons have any at the moment. Graham Brown of VCSA will also refurbish them and has spares for most of the internals. Please be aware that there are many variations and especially the arms, in term of length and offset, I have the measurements for LG45 if needed. On the LG45 saloon mine has an anti-roll bar arrangement to compensate for the body roll. In theory the only difference between the two types are in how the damping levels are adjusted. The fixed are adjusted by an adjusting screw and the variable by oil pressure from the spill valve. For my Replica it took me over two years to find a set, they then were refurbished. Work on approx. £100-150 per Luvax for refurbishment - it is rumoured that a complete set of old but tired Lagonda Luvax changed hands at over £2000 recently!

Stephen

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## Re: variable damping suspension

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*Written by Peter S30 at Jan 18, 2010 5:46 pm*

Dear all,

thank you for informations. One open question: is it worth to try to get the rear shock adsorbers adjustable, do you really feel the difference?

I will post here later a foto of my actual ones and a designation ( if I can find it )

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### **Re: variable damping suspension**

*Written by DavidLG45 at Jan 18, 2010 5:49 pm*

It took me years to find a set. I then had them overhauled by Stevson - I only paid about £45-50 each for the overhaul but they were in good condition and was probably 10+ years ago. I was told at the time that they had a list of people wanting them so any they found had a buyer waiting, so worth asking if they still do that. I believe the ones that don't have the interconnecting pipes are type ALC - I bought a pair ("Type ALC" cast into the casing) and later swapped them for the ALCR type I wanted. There are different pump arrangements too - some had a pump fitted to one of the rear shocks while other (later?) ones have a separate pump on a chassis bracket behind the rear axle with an actuating lever clamped to the axle casing. The torsion bar is fitted to the later cars and fits between the arms, so different arms are needed. If fetching that sort of money one wonders if re-manufacture is viable?

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