

# Lagondaforum: Leaf Spring Bodge Buttons

## Leaf Spring Bodge Buttons

*Written by bruffsup at Dec 30, 2017 5:28 pm*

These were in one of my rear leaf springs so I thought I would make new ones and a set for the other side as well I have the bronze and a lathe but would like to know the appropriate thickness. As you can see some are more worn than others.

Already done, made a bunch of them a little thicker than what was in there. I am going to now assemble the leaf packs and see what it looks like. I had 4 new main springs made ,fronts are assembled on the frame. If I knew what the whole front 'sprung' weight was I could see if I have the minimum 2 inches clearance to the bump stops.

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### Attachments:

[IMG\\_4541.jpg](#) (filesize: 180.04 KB)

[IMG\\_4542.jpg](#) (filesize: 174.96 KB)

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## Re: Leaf Spring Bodge Buttons

*Written by h14 at Dec 31, 2017 12:29 pm*

Hi Barry,

I thought these buttons were intended as a temporary fix for worn springs, to enable putting off the day for removing, resetting and retempering. Also...I think the Club supply these as part of the spares service...although of course it's probably more cost effective for you to make them, given your location.

On the V12 and LG6, final height adjustment for the rear springs is enabled by means of thin oblong aluminium plates, which fit between the spring saddle underneath the rear axle and the top leaf, with unused ones underneath the bottom leaf. This arrangement is great and simple...but with a huge flaw in that you can only reduce the ride height! As a refinement, there is also a canvas? reinforced rubber "plate" either side of the aluminium plate pack above the top leaf.

Don't get too anal about setting your ride height now...the new springs will undoubtedly settle somewhat in use. Indeed, I continue to have trouble with the springs I had made 20 years ago...they have been reset several times...but yet again, the LG6 sits too low. So much easier with the torsion bars at the front, where I can alter ride height to my heart's delight!

Laurence

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## Re: Leaf Spring Bodge Buttons

*Written by bruffsup at Dec 31, 2017 2:33 pm*

Great info Laurence, I'll keep posting my progress.Thanks and Happy New Year

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## Re: Leaf Spring Bodge Buttons

*Written by bill at Jan 02, 2018 7:34 pm*

I found these same brass/bronze "buttons" in the leaf springs on my LG45. I don't think that they were a temporary fix but part of the original equipment. However the company who reset my springs (Jones Springs) told me not to bother replacing them as they did nothing ! Therefore I left them out and have never had any problems over the last 10 years or so !

Hope this helps.

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## Re: Leaf Spring Bodge Buttons

*Written by Bill LG45 at Jan 03, 2018 11:57 am*

Happy New Year Barry

As leaf springs wear the ends of each leaf tend to create a ridge on the underside of the leaf above. This effect is more noticeable when springs are used dry but can still occur to some extent even when well lubricated and protected by gaiters.

These wear ridges stop the leaves sliding over each other as the spring is compressed and if bad enough makes the main leaf carry all the load possibly resulting in a bent or broken main leaf or possibly even damage to the chassis when a pot hole is encountered!.

When assembling a leaf spring you can reduce the wear by grinding a small chamfer on the upper edge of each end of each leaf to eliminate the

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sharp edge wearing the leaf above.

I have come across these buttons on other cars, forget what now many years ago, probably a prewar Austin... I guess they were an attempt to prevent wear...I do recall at least one worn spring I took apart with these buttons having quite badly distorted leaves. Suggest these buttons are neither use nor ornament!

When the springs are not lubricated, some manufacturers fit thin **pure** zinc sheet interleaves between each leaf, this makes much more sense and seems to work well as it eliminates wear on the leaves and helps to prevent rust sticking the leaves together as this can also result in the main leaf taking all the load and failing.

If ridges are present but not too deep I have in the past polished them out with a soft disc on an angle grinder but one must take care not to remove too much material and weaken the spring.

On several occasions I have found that simply stripping down the springs, cleaning them up and removing any ridges has returned them back to serviceable condition without need for re-tempering.

A reputable spring maker / repairer will have a press with a load cell so they can measure the amount of load required to deflect the springs a given amount.

Whatever you do, I would take the springs and have them checked out like that, if you tell them the weight of your car they should then be able to make a good guess at whether the ride height will be within acceptable limits and whether each pair of springs are approximately equal. You can then decide if they need re-setting or perhaps some new leaves...

Hope that helps

Bill

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### Re: Leaf Spring Bodge Buttons

*Written by bruffsup at Jan 03, 2018 6:37 pm*

Great advice Bill ! Yes I have carefully polished out any ridges and rounded the sharp corners on the ends. I have also had 4 new main leafs made .I have assembled the front springs and used the zinc interleaves as well as a special marine teflon grease. I also made new "guides and brass "rollers" . New bronze bushings at the rear of the front link and new silent bloc bushes and pins in the main leafs. They look great. One side of the rears had the bronze buttons on the 3rd 4th and 5th leafs from the top so I have made up enough new ones for both sides. Both rear leafs also had the zinc interleaves so those will be assembled as the fronts. Now if I can just get my shop pellet furnace working again I will be back at it! We had over a week of minus 35 ish C , unusually cold for even here.

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### Re: Leaf Spring Bodge Buttons

*Written by bill at Jan 03, 2018 9:00 pm*

I also came across the zinc interleaves but not too keen on those either !

However I did find out that modern restorers of (I think) MGs use a circa 1mm hard plastic sheet instead of the zinc interleaves and this works just as well. It might be worth researching this possibility if you are interested.

Zinc interleaves can tend to corrode when water gets in which is the reason I did not use them.

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### Re: Leaf Spring Bodge Buttons

*Written by bruffsup at Jan 03, 2018 11:38 pm*

good point as I did see some minor corrosion on the very top leaves near the tips but not enough to worry about so I just snipped a few inches off. The gentleman in Cleveland who made new gaiters for me suggested greasing everything and then wrapping the leaves in bandage before installing the gaiters I have remnants of the original gaiters and saved the button grease fittings which I will install. maybe the sheets of plastic you are talking about are teflon. I have seen adverts for modern hot rod springs using teflon buttons

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### Re: Leaf Spring Bodge Buttons

*Written by DavidLG45 at Jan 04, 2018 8:35 am*

A description of the process using plastic - High Density Polyethylene - interleaves on [this blog](#)

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### Re: Leaf Spring Bodge Buttons

*Written by bill at Jan 04, 2018 10:06 am*

When it comes to wrapping the springs I used "Denso tape" which is a grease impregnated tape used in the plumbing industry to protect copper pipes against corrosion. It is very good at binding to itself and is almost impervious to any water ingress. It is not particularly "pretty" so better to be used on springs that cannot be seen.

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