MGB Parabolic Springs Upgrade—Report from Peter Grice.

Introduction

As my 1973 B GT was suffering with a saggy rear end and the MGOC was offering a deal on parabolic leaf springs, together with a free fitting kit with polyurethane bushes and pads, I decided to take the plunge. Of course, no instructions are provided and the Haynes manual goes little further than suggesting the battery is disconnected (joke). What I thought should have taken a few hours turned into two weekends of trauma. Here is my hard learned suggested approach.

Rear Springs Removal

A few days before starting work, spray Plus Gas or similar on all nuts and bolts to be removed.

Using a trolley jack under the rear axle differential carrier raise the car and place on axle stands just in front of the front bolt on each leaf spring. Leave the trolley jack in situ, just supporting the axle weight. Then disconnect the rebound straps from the axle and shock absorbers from central brackets under each leaf spring.

I do not think the sequence of the next step is important but working on one side at a time, place a second jack under the brake drum and remove the old leaf springs by removing the rear shackle nuts and washers (do not discard as new ones are not provided in the kit), the front bolt and the centre U-bolts and brackets. The rear shackles may require some persuasion with a stout screwdriver or crowbar. The front bolt can be a rear pain to remove and in the past I've had to resort to a hacksaw – remember to use plenty of copper grease when installing the new bolts.

Now clean-up and paint the shackle and centre brackets. Appropriate blobs of Waxoyl can be applied to the car as and where required.

Fitting the Parabolic Springs

Begin by liberally lubricating the rear shackle bushes with the grease provided and insert into the parabolic spring and car chassis leg using a piece of all-thread with washers and nuts at either end (see images 1 and 2).

At this stage I could neither insert the shackle pins through the chassis or spring bushes. The reason being twofold: -

Once fitted, the internal diameter of the poly bushes reduces to become well over 1mm smaller than the shackle pins (see images 3, 4 and 5).

The shackle pins have a pronounced flange or edge at the end of the threads. I had to file these down to allow smooth progression of the pins through the bushes (see image 6).

Using the drum jack to adjust the height, offer up the centre of the parabolic spring, with poly pads and brackets fitted, and fit the U-bolts and nuts. This is fiddly and the use of bricks can be recommended to support the spring whilst jostling into position. DO NOT TIGHTEN THE U-BOLT NUTS! Keep it slack (see image 7).

Next, fit the front bolt. Again, jostling will be required to align the fixing points with the front eye of the spring. Screwdrivers/drifts, etc are useful but I used an old bolt ground to a bullet point at the end. Do not forget to use plenty of copper grease. Put the washer and nut on but keep it loose.

Now for the rear shackle. This has to be inserted into both the spring bushes and the chassis bushes at the same time. Room is tight and no way could I generate sufficient muscle to do this by hand. The answer is to use water pump pliers to straddle the far side of the shackle across to the other side of the chassis leg. Patience pays dividends but slowly the shackle will push into the bushes until the threads appear the other side and the washers and nuts can be fitted (see image 8).

Tighten all nuts to remove the slack, fit road wheel, and lower to the ground before tightening completely.

Enjoy the new driving experience.

Peter Grice

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