

oily Bits

It's been a busy Winter for Doug Johnston – and brakes have been on the Agenda in Malta

REAR-END REFURB OR, HOW I STOPPED WORRYING AND LEARNED TO LOVE POLYURETHANE...

Having removed the rear suspension lower links from my 3500S, I'm not sure what drove me to take all the rest of the rear suspension and transmission down – fear of the unknown, possibly?

In this case, the fear proved amply justified. Of the twelve bushes in the system, seven were beyond mortal aid, and two others were poor; of the differential, two of the three mountings had failed, all three oil seals were weeping to one extent or another, and two of the four universal joints were also terminal. The De Dion gaiter was also slightly weepy. In addition, the whole thing looked rusty and decrepit. It's this sort of point that I usually start weighing up the pros and cons of digging a big hole, chucking the car in, and walking away – but insanity won out, and I started ordering the necessary parts. With recent prior knowledge of what time can do to rubber bushes, I started wondering about the polyurethane items.

The standard Metalastik bush consists of essence of a hollow roll of hard rubber, moulded to ordinary steel sleeves inside and out. They locate into wherever they are going by the friction of the outer sleeve inside the ferrule. Being ordinary steel, there can be corrosion problems. The polyurethane item, on the other hand, is simply a moulded lump of plastic. It locates by having a rim at each end which

P6 Rover Owners Club

is 1/4 inch or so larger than the diameter of the ferrule. This means that the rim has to be compressed down to pass through the ferrule, which can be done because the plastic is malleable, and the shape allows a chamfer to start entry to the ferrule.

Afterwards, a stainless-steel tube is pushed through the centre, to prevent the plastic deforming and allowing the bush to slip out, and to provide a bearing surface for the bolt which passes through the centre. The nice shiny colours they came in, black, aubergine, orange and yellow, were certainly a change from Metalastik matt black. The instructions were very simple, make sure the bush ferrule is clean and intact, push in the new bush with the aid of some graphited grease. If you need to, put the bushes in boiling water to soften them up a bit.

To be fair, it was almost as simple as this. Not having a vice with jaws wide enough to accept the wider bushes, I used a length of 7/16ths studding, with the big shock absorber washes either side, and this worked well. It worked even better if I used a Jubilee clip to squeeze the bush down before it entered the ferrule.

The only real problem lay with the upper link bushes. These are quite large in diameter, but also quite narrow – the dimensions did not permit any chamfer. In the case of the larger one, the ferrule was 1 7/8ths diameter, as opposed to the bushes, whose ends were 2 3/16ths. Although a Jubilee clip could pull this in to about 2 ins., this was not good enough, even using the boiling water trick.

It was at this point that I had to go a talk nicely to a friend of mine, a superb engineer, who has a very capable home workshop. He produced two two-piece devices resembling big-ends, with a funnel-shaped internal contour, which did the business in minutes.

All this makes me wonder – has anyone else ever fitted these polyurethane upper link bushes before? And if so, how did he do it? Answers please, on a postcard, to the Editor – I'm sure he'll pass them on.