

## **Cracker gets new kingpin trunnion bushes:**

While changing my hubs and wheels from wire to steel I decided to renew the top and bottom trunnion bushes while I had easy access.

### **Note.**

*You can change the top bushes with the road wheel in situ but for decent access you need to remove the road wheel to change the bottom bush. If, like me, you have the wheels and hubs off then you can gain even better access to the bottom trunnion by removing the brake backplates.*

My modus operandi was as follows.

### **Changing the kingpin lower trunnions pins and bushes:**

1. Jack up under the spring pad to slightly compress the spring; if you have the car supported by wooden blocks under the front crossmember then don't raise the car off the wooden blocks. You just need to raise the jack enough to lift the shock absorber arms off of their rubber stops.
2. Loosen the two nuts and bolts that retain the rear wishbone to the spring pad this is to allow the wishbones to be pulled slightly apart to aid fitting of the new parts).
3. Replace the bolt, nut, bush and seals etc. retaining the lower king pin trunnions to the wishbones.
4. Tighten the two nuts and bolts that retain the rear wishbone to the spring pad.
5. Lower the jack.

### **Changing the pin and bushes in the kingpin upper trunnions:**

1. Jack up under the spring pad to slightly compress the spring; if fitted don't raise the car off the wooden blocks under the crossmember. You just need to raise the jack enough to lift the shock absorber arms off of their rubber stops.
2. Loosen the nut and bolt that clamps the two shock absorber arms together.
3. Remove the pin through the kingpin upper trunnions, clean and re-assemble with new parts using polyurethane bushes. Line up the flat on the side of the domed bolt head with its mating lug on the shock absorber arm.
4. Tighten the nut and bolt that clamps the two shock absorber arms together.
5. Lower the jack.
6. Grease the king pins.

Now that sounds easy doesn't it? Wrong! Things did not go according to plan on the right hand side (offside). The left side was much easier and total time to replace both sides was around ninety minutes for the two top trunnion bushes and 1 hour for the bottom two.



This is the kit of parts to re-bush the lower trunnions and is reasonably easy to fit. The right side went according to plan, the left side less so. The problem was the split pin hole was partially covered by the nut when fully tight. The answer was to replace the thick spring washer with a flat one which allowed the split pin to be fitted. Bearing in mind it's got a castle nut and split pin I cannot see any need for a spring washer anyway.



That's one side done.



When knocking the pin out of the upper trunnions support the shock absorber arm (at the position the screwdriver is pointing to) with something heavy like a club hammer.



These pins often get rusted in, which is why you need to support the shock absorber arm when hammering out the pin.



Support the stub axle to prevent the assembly flopping about and injuring itself.



This is the bush kit for the top trunnions. Lubricate everything with the white grease; i.e. the pin, steel sleeve polyurethane bushes and inside the trunnions where the bushes sit.



While working on Cracker I often find hidden bodes. this is the latest, presumably the builder had difficulty fitting the bush kit so they cut the steel sleeves in half with a hacksaw the idiot(s) obviously didn't realise that it's the steel sleeve (clamped between the shock absorber arms) that sets the tension on the bushes.



Now the problems start, you cannot press the bushes in by hand much further than this.



The answer is to press them in with something like a carpenter's clamp. Once pressed in they stay pretty much fully in. Now comes the next problem, you should be able to see that the bushes don't line up with the gap between the wishbone arms. The answer is to loosen the four bolts that retain the shock absorbers to the subframe; this will give you (hopefully) the movement you need. **Don't forget to tighten the bolts afterwards.**



Using a suitable piece of wood lever the shock absorber arms slightly apart and push the kingpin/trunnion into position.



The right hand side all complete, jobs a good-un! I don't like the practice of **not** using flat washers but if you fitted a washer under the castle nut the split pin hole wouldn't line up.



And the left hand side completed. If you compare this with the right side you will notice the nut is at the front on the left side and at the rear on the right side! The shock absorbers are bi-sexual (not handed) but the cut-out to retain the shaped bolt head means the bolts face different ways.