



Bristol Austin Seven Club

Bristol Austin 7 Club - technical article

www.BA7C.org

The majority of these tips have appeared in club newsletters over the years. Please note that you use them at your own risk as neither the Bristol Austin 7 Club nor the authors can be responsible for the results of trying to follow the instructions given.

Leaking rear axles a problem from the 1930s ! - by Terry Griffin

Incorporating a torque tube seal conversion in conjunction with axle shaft oil seals (obtainable from Seven Workshop). This is a relatively simple and self explanatory task and only requires a simple turning job on the lathe; can be undertaken on any axle with a scroll nut; and has the advantage that you can fit without removing the torque tube.



A. Adjuster B. Spring Ring C. Washer D. Oil Seal E. Seal Cup F. 'O' Ring

Assembly instructions for axle shaft oil seal

Press oil seal into seal plate with the spring facing outwards. Fit the "O" ring to the back of the seal plate. Fit into the axle casing with the washer. Compress the seal assembly by using a length of screwed rod, nut and large washers through the casing. Fit the spring ring into the casing, pre lubricate the seal before fitting the adjuster. The axle shaft seal with additional 'O' ring will stop oil leaking

around the outside of the seal cup. Lip seals in the hubs complete the task.

Note. You may find that the size of 'O' ring is selective as there is a variation in the recess for the seal holder. Nominal size of 'O' ring 1 3/4" OD 1/8" thick.

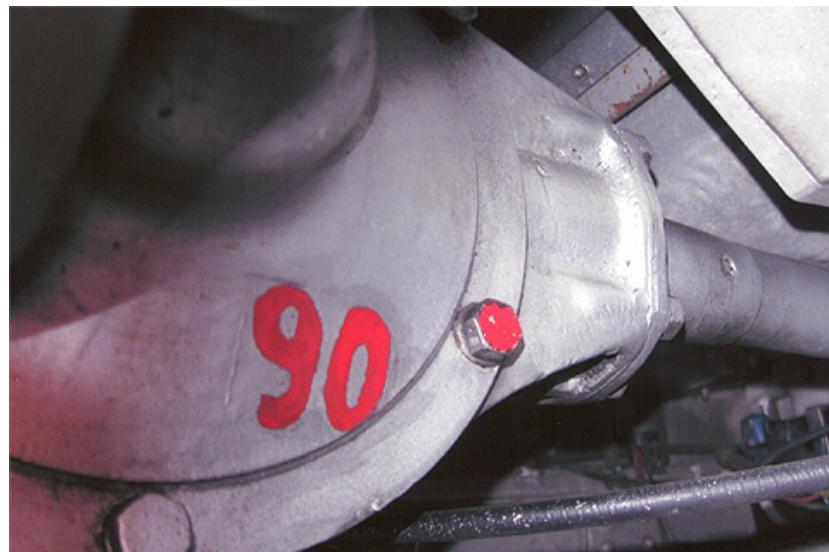


Torque tube seal preparation

The torque tube seal conversion requires a Viton rotary oil seal with garter spring. This can be purchased from www.LancashireSeals.co.uk which fits into the brass scroll nut you have machined to a depth of 7/16" for the seal. You need to make a 1/8" spacer to position the seal on the drive flange (see photos). The spacer can be made from brass, aluminium or steel. Seal size 33x45x7mm a Viton seal wears better than Nitrile.



Finally with effective sealing the viscosity of the rear axle oil can be reduced to 90 grade reducing axle drag considerably. Mark the bolt as photo as this can be your level plug on three piece axles with horizontal torque tube, fit the bolt with a copper washer.



Update Axle Shaft Oil Seals

The imperial seals normally used in the seal cups are not a very good fit and tight on the 0.890" axle shaft they are also too wide and need the outer edge of the seal reduced.

The new seals are metric size 23x38x8mm fit flush in the cups and a better fit on the axle shaft. They are available from www.SimplyBearing.co.uk

Note - A7 Components - www.a7c.co.uk - will be stocking these axle shaft seals in future.

