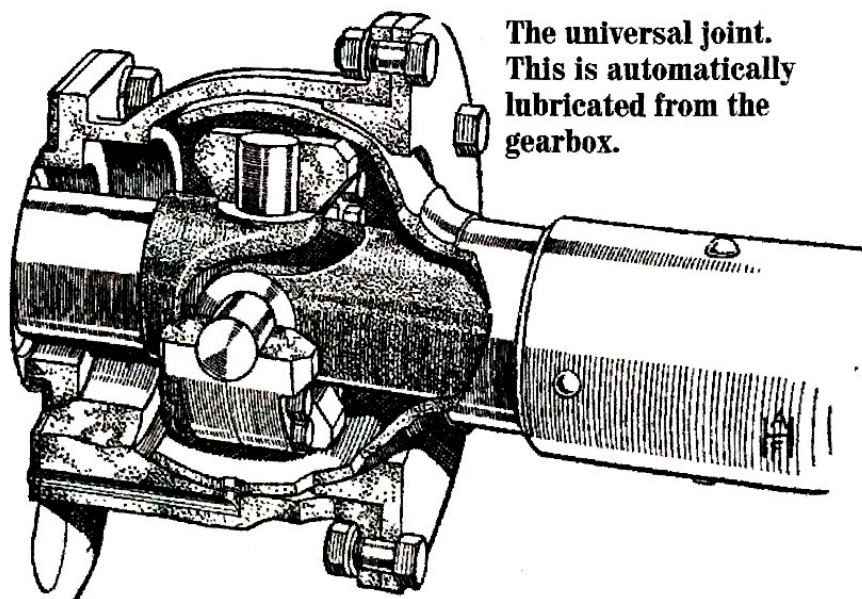


Universal Joint Lubrication

I have now had a Morris-Cowley car for two years. and must say that I am very pleased indeed with its general reliability and wonderful performance. As an enthusiastic amateur I, of course, endeavour always to carry out my own running repairs and adjustments, and although I have not had occasion to give attention to the propeller shaft universal joint, it does not appear to me that there is any means of lubricating this part, and I shall be obliged if you will kindly describe the system employed, since obviously a component of this description could not run without lubrication. – I.G.

In reply to your query, we have much pleasure in advising you that lubrication of the propeller shaft universal joint is effected by splash with oil delivered from the gearbox main or sliding shaft. At the forward end of this shaft, which fits into a bush in the clutch drive gear, a spiral groove is cut so that when travelling on an indirect gear oil is forced into the small space in front of the end of the main shaft and inside the drive

gear. This oil then passes as a result of the propelling action of the groove, down the shaft to the universal joint, where it splashes on to the fork prongs and lubricates these parts. When travelling in top gear this action does not, of course, take place, but provision is made for oil to be fed to the front end of the main shaft by other means, namely, the squeezing of the teeth of the constant mesh of the gear wheels as they engage, holes being drilled in the drive gear pinion to permit of the oil caught in the teeth to pass into the main shaft bearing and thence to the other end of this part. Provision is made for oil delivered to the universal joint in its housing to return to the gearbox via a small passage drilled through the rear gearbox wall, so that no oil is actually lost from the gearbox, but at the same time the universal joint is properly lubricated.



The universal joint. This is automatically lubricated from the gearbox.

In this BNMC journal is this 1926 magazine extract that explains just how the Cowley Universal Joint is lubricated and, more to the point, how the oil gets back into the gearbox and not lost in feeding the differential.