## Workshop 44

## Replacing universal joints on the rear prop shaft of a Nissan Terrano

Symptoms of the universal joint showing signs of excessive wear begin with a vibration or rumbling whilst the engine is under load, this then develops into a clunking noise whenever the prop shaft is rotated.

First of all having climbed underneath the vehicle it was obvious that there was wear due to the amount of excessive play or movement in the universal joint.

Next the prop shaft was removed by simply undoing 4 17mm bolts and nuts with locking washers on the rear axle end and the gearbox end simply slid out as it only sits on a splined shaft inside the gearbox.

Having done a little research before attempting this job it was suggested that the universal joints and the bearing cups could simply be bashed out using a hammer and drift, i wasn't sure about this so i invested in a big vice enabling me to press them out and the new ones back in.

Having done this i would say i probably would not have been able to remove or refit them without the vice.



Here you can see the prop shaft having been removed and the circlips

Next the circlips are removed, they were very awkward and i actually bent a pair of circlip pliers trying to get the first one out, i found it easier to bash the end of the circlip and forcing it to close on itself and hold in all the crap and muck whilst i then prized it out.



It is also important to remember to mark the saddle and shaft so that they go back where they came from as the shaft would have been balanced when originally built.

Next i got a socket small enough to push the universal joint out of its holder by pressing it in the vice, it takes a while and a lot of pressure but it suddenly popped.

Then i got another socket large enough to place over the other side so that the universal joint cup can be pressed almost all the way out, the last little bit is pulled out using a pair of grips.



Time to clean all the surfaces up as well as the circlip rebate and a little bit of grease to help the cups slide back in.

Again it takes a bit of brute force but they do eventually pop into place, then to replace the circlips with new ones that came supplied with the kit and the grease nipple



Fill with grease and same on the other end.

Once both ends are replaced simply slot the gearbox end of the shaft back in and secure the four nuts and bolts on the axle end.

Job done, in total i would say it took approximately 3 hours.