Rover PG1 Gearbox (620Ti)

Part1 - The strip down

Since my gearbox seems to have the idea that it thinks it's funny to keep spitting the drive shafts out and chewing them up, I needed to do something about it.

I had heard that the gearbox off the Rover 620 Ti would fit. Why not, it's the same engine after all. There are two main differences, 1) The 620 has a hydraulic clutch 2) The 620 has different gear ratios and final drive. What this means is...you have to nick the clutch arm off your old box and you will have better acceleration (bonus!). Due to the 620 being heavier it needs different gearing.

Also in the PG1 gearboxes, Rover, Honda or whoever....used plastic cadged bearings for the differential. As shown in pictures 10 and 11. Mad I hear you say. Well, you can get up-rated bearings for this gearbox, picture 12, which I may as well fit at the same time.



gearbox code (C6FTUT)



1 - 620Ti gearbox

2 – waiting



3 - You can see right through!



4 - bellhousing



5 - end picture showing access holes











8 - it looks like it should....



9 - well it fits ok...



10 - Diff and old bearing



0

11 - Close-up

12 - New metal cadged bearings



Part2 - The rebuild

Well, day 2 and I start again. I got the old bearings off the diff shaft. Ideally you need a three leg puller for this. Hammer the new bearings on the diff using a large socket, as not to put any pressure on the outer ring of the bearing. Making sure it's fully home. (pictures 4 & 5) At this point with the empty casing, I cleaned both matting surfaces with a scraper and a fine wire brush and finished off with emery paper.

Next I fitted the diff complete with the new bearings into the casing, then slotted the gears complete back into the casing, making sure that the selector rods where sitting in the base. Next the selector and reverse mechanism (pictures 8, 9, 10, 11), then the reverse idler gear. I used thread lock on all the bolts that I put back in. Pictures 12 & 13, the case is ready to go back on.

1 - Plastic speedo ring



2 - Plastic speedo ring 2



3 - Diff with old bearing



4 - Diff with new bearing



5 - Other side of diff with new bearing



6 - Empty gearbox casing



7 - The gears taken out complete





8 - Close up of the internals to make sure I got everything back right

9 - Reverse gear selector



10 - Reverse idler gear



11 - Gear selector mechanism



12 - Back together.....



13 - Ready for case to be put back on....



Part3 - Old Gearbox out - New one in..

Well there she is, ready to be set upon by a couple of monkeys..!





I think I've got a bit of a oil leak, its a Rover..so what's new.

Close-up of said leak. (headgasket)



Take the front crossmember out, it's much easier.



View of gearbox from nearside wheel arch.



You can see from this that it's a TorSen diff, though the driveshaft hole, its solid with a small hole.





With the crossmember gone you have much more room to work.

A better view from the underside.



Stabilizer bar for gear change mech.



A second underside shot.



View of clutch with gearbox removed.



Old and very oily gearbox out.

