944-SPEC - 944SPEC - low cost wheel to wheel racing

Generated: 30 June, 2025, 23:57 tranny rebuilds Posted by tcomeau - 27 Sep 2012 08:00 Hey guys, Our trannies usually die due to ring and pinion failure. We just replace the whole tranny with one that works and get back to racing. I have at least a dozen trannies in the shop inventory that have a broken R & P. I've been trying to find someone who can CNC new parts cheaper. No luck. Porsche has the R & P sets, but they cost \$947 to the average guy on the street. trannies? Shops? **Thanks** Re: tranny rebuilds
Posted by 1M Fan - 27 Sep 2012 08:28 I'm new to the Porsche tranny's but I know the VWs have issues with ring gear being rivited. They have bolt kits to solve the problem. Is that the issue with Porsche? Re: tranny rebuilds
Posted by Sterling Doc - 27 Sep 2012 12:16 I'd have some interest, but with used trannys running \$150 these days, it would have to be a pretty big discount. Re: tranny rebuilds
Posted by AgRacer - 27 Sep 2012 14:53 I think the ring and pinion on my trans is about to go. About how long between the time it starts to whine and when it finally fails? I was also looking for a replacement and was leaning towards the used cheapo vs an expensive rebuild. I just wish there was a way to make this more reliable because it seems like the ring and pinion are very prone to failure. Is there anything that can at least delay further damaging wear?

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Re: tranny rebuilds
Posted by ChuckS - 27 Sep 2012 16:55

Agracer, if the noises started recently, some new carrier bearings will likely save your trans!

Tim, correct me if you do not agree, but the early noises you hear are bearings starting to fail. The carrier bearings are the most common. They are cheap and easy to replace. However, most of us let them go until failure that takes the R&P with it. The counter shaft bearings also make a lot of noise, but are usually not the cause of catastrophic failure.

As I see it, there are two completely separate reasons for R&P failure. First is as noted above. Other bearings fail, which changes the lash on the R&P and then wears until either the carrier bearings fail and lock up the trans, which in turns snaps the pinion gear and usually takes a few ring gear teeth with it.

The second reason is simply applying too much stress on the drive train. If you speed shift hard or "dump the clutch", the forces between the engine and tires all collect at the R&P and it breaks. This is less common (especially if all of the other bearings are good), but can happen. Ask me how I know!

I think what Tim is asking is can we all get someone to make some stronger R&P gears, like on the Turbo S, except with the correct ratios. If we could get that done, (with fresh bearings) we might end the constant breaking of 944 transmissions.

At least this is my understanding having gone through way too many transmissions. Corrections and more insight gladly accepted.

Re: tranny rebuilds Posted by joeblow - 28 Sep 2012 05:35

Is temperature a contributing factor here? Obviously if it is we can mitigate that with cooling.

I found in the higher HP 951 cars and all the 911 and GT cars that i have worked with that spot cooling/lubricating with spray bars, strategically placed, the trannys lived a lot longer. On the 951s I just needed one return from the cooler to a single jet spraying the pinion/ring mesh point. Never had a R&P failure on a 951 after that. I also never had a gear stack failure, period, it was always the R&P.

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