

Country Homes Campers

Instructions for 3.27 R&P Install

Ring Gear:

1. Before taking the differential all apart measure the factory back-lash setting. Use that setting for the new R&P.
2. Measure the thickness of the original Ring Gear and measure the thickness of our Ring Gear. Our Gear is slightly thinner therefore you will have to cut down the bolts accordingly. Usually 2 or 3 threads.

Pinion Gear:

1. Make sure you are using the correct S3 shim. **This is very important.** Use a 1.3mm shim, part number 082 519 141 AN. This is the shim behind the Pinion gear on the shaft between the gear and tapered bearing. To find correct S4 shim you will have to follow the Bentley manual and measure 2 or 3 times to make sure you get the correct S4 shim or measure the original S3 and compensate. For example if the original S3 shim is 1.5mm and you replacing it with a 1.3mm then you have to add .2mm to the S4 shim. This is a guide, some installers go by feel and they are the good ones.
2. To switch out the pinion gear you must heat the pinion gear and freeze the shaft. Make sure you line up the ridges and press it on. Use the Bentley Manual to check temperatures.
3. As for the preloads the bearings will dictate that setting. Please use German bearings and not the Chinese copies.
4. **When all is complete use the paint method to check the pattern of the gears.** If they look good finish the install.
5. Use the correct Hypoid lubricant in the differential. The Bentley Manual states Hypoid oil SAE 90, Mil-L2105 B about 1.3 quarts. If you can't get this oil then use an equivalent. No Redline, this will void all Warranty.

Recommendations:

1. Rebuild the differential with new bearings, gaskets etc. You do not want to mix new parts with old parts.
2. If you have more questions you can contact me at 858-922-6424(cell) or email me at info@countryhomescampers.com

Enjoy your new 3.27 Ring and Pinion.