

Done Right Diesel LLC



How to Break in a Ring and Pinion

The suggested break-in procedure for a ring and pinion gear is as follows:

- Drive 15 to 20 miles under normal driving conditions (no highway speeds), stop and let differential cool before proceeding, repeat this process 2-3 times
- Avoid heavy accelerating during the break in process
- Keep the vehicle under 60 MPH for the first 100 miles
- Highway driving also requires proper break-in due to the higher heat temperatures produced, drive 15-20 minutes at max 65MPH, stop and let differential cool before proceeding, repeat this process 2-3 times
- Driving on a new ring and pinion before the initial 500 mile oil change should be under normal driving conditions: no hard starts, racing, off-roading, towing, and should not be flat towed.
- Change Gear Oil after the 500 mile break-in, this removes metal particles and phosphate coating from the gear set during the break-in period.
- Towing: After the 500 mile oil change, the first towing should be less than 15 miles, then let the differential cool before proceeding, Repeat this process 2-3 times

Ring and Pinion Gear Service

Follow the factory service manual for recommended differential service intervals unless the vehicle is regularly used in extreme conditions. If this is the case, you will want to service the differential more often. A good rule of thumb for heavy-use vehicles is to service them twice as often as a normal-use vehicle.

The recommended gear oil is an 80W-90 or 85W-140, non-synthetic, GL5 grade or higher from a name brand. Revolution Gear & Axle offers both 80W-90 and 85W-140 gear oil and can be purchased with any ring and pinions. Please note extreme weather conditions may require alternative weight oil so be sure to consult a local mechanic or lube technician for recommendations.