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Disclaimer: We strongly recommend that your ring and pinion be set up by a professional who has extensive knowledge in setting up ring and pinion gears. In most cases the this is not a direct swap from your cast housing to the billet machined housing. Based on variations measured across dozens of housings you will need to add the .010 shim to your pinion gear for it to pattern correctly. This is a very basic set of instructions and is not intended to be a set up guide or instructions of how to set up your ring and pinion correctly. If you do not have extensive experience setting up ring gears do not set this up on your own. Your rearend will not only make a lot of noise, but it will also fail prematurely as a result.

Tools Required

Bearing separator
Dial calipers
Dial indicator with magnetic base
Gear marking compound
Torque wrench
8mm & 12mm Allen wrench

1.Remove the rear cover of your differential housing exposing the ring gear. DO NOT remove the ring gear.

2. Install the bearing caps and torque them to 120# and check the back lash on the ring gear. It should be between .003-.005". Brand new housings from Dodge are right at .004". You need this measurement so that you can set your ring and pinion up correctly in the billet housing.

3. Mark the ring gear with compound and mesh it in correctly.

4.Disassemble the remainder of your stock housing and swap all the races and parts. Remove the pinion bearing and add the .010 shim underneath of the pinion bearing in addition to the factory shim. We have provided a .020 shim to put behind the crush sleeve on the pinion so you can put the correct amount of preload on the pinion. If this is not done correctly it will cause premature failure to the ring gear and housing.

5. Using the same set of bearing caps torqued to 120#. Set the back lash on the ring and pinion to the same amount that was in the cast housing with the shims provided. Check the pattern with new gear compound on the opposite side of the gear. Adjust as needed.

6. Remove the caps and seal the two halves together with gasket sealer. Torque the small bolts to 40ftlb and the large bolts to 120ftlb.