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# **BREAKING IN NEW RING & PINION SETS**

# INSTRUCTIONS AND PROCEDURES

# **GENERAL NOTES**

Increase the lifespan of your new ring and pinion set and avoid damage by taking the time to properly break it in. New R&P sets straight from the factory have microscopic peaks and valleys on the faces of the gears left over from the manufacturing process. The lapping procedure performed when ring and pinion sets are initially mated together helps remove some high spots. However, this process cannot simulate the loads encountered during real world operation. True break in can only be done in the vehicle.

#### **BREAK IN PROCEDURE**

During initial use, running new R&P sets will create more heat than normal. If a new set is run too hard or for too long, a critical amount of heat will be generated that can damage the steel as well as the lubricant. This will result in increased wear and decrease the lifespan of the parts.

## Take the time to properly break in your new R&P:

- On initial use, drive easy. No hard launches. No full throttle or high speed runs. No towing.
- Drive for 15-20 minutes. Stop and let the gearbox cool for 30 minutes. Repeat 3-5 times.
- Replace lubricant after initial break in and short run time.

Following this break in procedure will help to "work harden" the material by flattening high spots and compressing steel molecules near the surface. This will make your ring and pinion set a harder, better and more durable part.

### **REM POLISHING**

REM polishing will reduce the heat created and eliminate high and low spots on the gear faces, but it will not "work harden" the surface of the teeth. The break in procedure is still highly recommended.

#### IF YOU HAVE ANY QUESTIONS

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