



{ Each shipment of Yukon Gear & Axle gear sets includes an installation guide sheet indicating the gear type (two-cut or five-cut) }

## Gear Setup

The setup of a gear set can be accomplished by first measuring the carrier pinion depth. Install measuring tools and tighten to 18" lbs. Take a reading and determine required shim for proper pinion location. After installing pinion shim behind bearing, install in axle and tighten.

Install differential case assembly with ring gear into axle. Set up side bearing load and backlash per OEM's service manual.

When setting backlash, the rule of thumb for two cut GM gears is 0.004".

If the pattern looks as if it needs to be moved heel-to-toe or toe-to-heel but is centered face to flank. Do not change pinion shim.

The pinion shim gets changed only if the pattern is high or low between the flank and face of the tooth. A contact pattern that is centered from face to flank always indicates correct pinion depth even if a pattern that is centered from heel to toe cannot be obtained.

## Two-Cut vs. Five-Cut Ring & Pinion Sets

Two-Cut and Five-Cut are machining processes that result in different patterns for set-up as seen below. Tooth height is measured from the flank (bottom of tooth) to the face (top of tooth).

### Two-Cut

The two-cut tooth is the same height at the toe (inside of gear) as it is at the heel (outside of gear). The two-cut gear set has a natural "bias" condition; that is, the pattern shows up slanted when the pattern is rolled with gear-marking compound.

**COAST**  
Face



**DRIVE**  
Face



### Five-Cut

The five-cut tooth height is shorter at the toe (inside of gear) and is taller at the heel (outside of gear). The five-cut gear set appears as a square pattern when the set is rolled with gear-marking compound.

**COAST** Face



**DRIVE** Face

