Desirable Contact Pattern

The contact pattern on the drive side (convex) of the tooth is centered. The contact pattern on the coast side (concave) of the tooth is centered. Notice in this photograph that both the drive and coast patterns are of equal length and equally centered.

Drive Contact Pattern

Toe-Heel Contact Pattern

The contact pattern on the drive side (convex) of the tooth is mostly towards the toe.

The contact pattern on the coast side (concave) of the tooth is mostly towards the heel

Correction: Move the pinion gear closer to the ring gear.

Heel-Toe Contact Pattern

The contact pattern on the drive side (convex) of the tooth is mostly towards the heel.

The contact pattern on the coast side (concave) of the tooth is mostly towards the toe

Correction: Move the pinion gear away from the ring gear.

Toe-Toe Contact Pattern

The contact pattern on the drive side (convex) of the tooth is mostly towards the toe.

The contact pattern on the coast side (concave) of the tooth is mostly towards the toe

Correction: Increase the ring gear backlash

Heel-Heel Contact Pattern

The contact pattern on the drive side (convex) of the tooth is mostly towards the heel.

The contact pattern on the coast side (concave) of the tooth is mostly towards the heel.

Correction: Decrease the ring gear backlash

Coast Contact Patterns