Replace the pinion spacer with a thinner one if the contacts are too low, to the flank side. The patterns will shift about 1.5-2.0 mm (0.06-0.08 in) when the thickness of the spacer is changed by 0.10 mm (0.004 in).

## **PINION SPACER:**

- A 1.82 mm (0.072 in)
- В 1.88 mm (0.074 in)
- 1.94 mm (0.076 in)
- 2.00 mm (0.079 in) Standard
- 2.06 mm (0.081 in)
- 2.12 mm (0.083 in)
- 2.18 mm (0.086 in)

## **BACKLASH INSPECTION**

Remove the oil filler cap.

Set the final gear assembly into a jig or stand to hold it steady. Set a horizontal type dial indicator on the ring gear, through the oil filler hole.

Hold the pinion gear spline by hand. Rotate the ring gear by hand until gear slack is taken up. Turn the ring gear back and forth to read backlash.

STANDARD: 0.08-0.18 mm (0.003-0.007 in) SERVICE LIMIT: 0.30 mm (0.02 in)

Remove the dial indicator. Turn the ring gear and measure backlash. Repeat this procedure once more.

Compare the difference of the three measurements.

## **DIFFERENCE OF MEASUREMENT** SERVICE LIMIT: 0.10 mm (0.004 in)

If the difference in measurements exceeds the limit, it indicates that the bearing is not installed squarely. Inspect the bearings and reinstall if necessary.

If backlash is too small, replace the ring gear left side spacer with a thicker one.

Backlash is changed by about 0.06 mm (0.002 in) when thickness of the spacer is changed by 0.10 mm (0.004 in).

## **RING GEAR SPACER:**

A: 1.82 mm (0.072 in)

B: 1.88 mm (0.074 in)

C: 1.94 mm (0.076 in)

D: 2.00 mm (0.079 in)

E: 2.06 mm (0.081 in)

F: 2.12 mm (0.083 in)

G: 2.18 mm (0.086 in)

H: 2.24 mm (0.088 in)

I: 2.30 mm (0.091 in)

Change the right side spacer thickness an opposite amount to what the left side spacer was changed; if the left spacer was replaced with a 0.10 mm (0.004 in) thicker spacer, replace the right spacer with one that is 0.10 mm (0.004 in) thinner.





