

## 6A-8 - FRONT AXLE (4WD)

FIG. 6A-13: Remove differential assembly thru the left hand end of the axle housing.

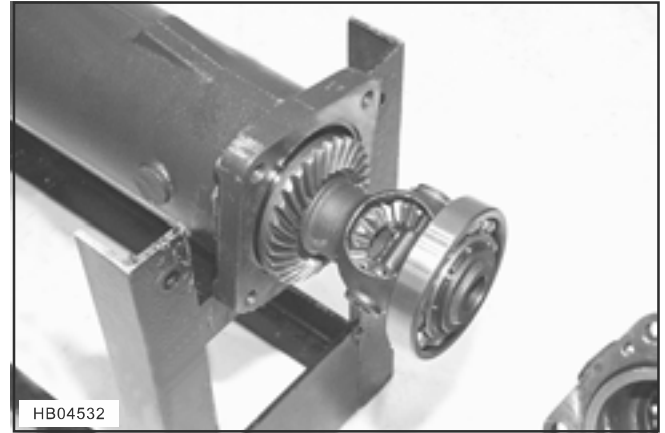


FIG. 6A-13

### FRONT DIFFERENTIAL

#### Overhaul

Remove differential.

*NOTE: The thrust play of the bevel pinions should be inspected before disassembly. If the play exceeds the specified value, correct it by shimming.*

Specified value	0.2 mm (.008 in.) or less
Available shims mm (in.)	Shim A: 0.2 (0.008) Shim B: 0.1 (0.004)

FIG. 6A-14: When removing bearings from bevel pinion, 3, release stake on lock nut, 1, then remove nut and remove bearings.

*NOTE: The lock nut should be staked at a point completely away from the threads. Staking near the threads may damage the threads of the bevel pinion.*

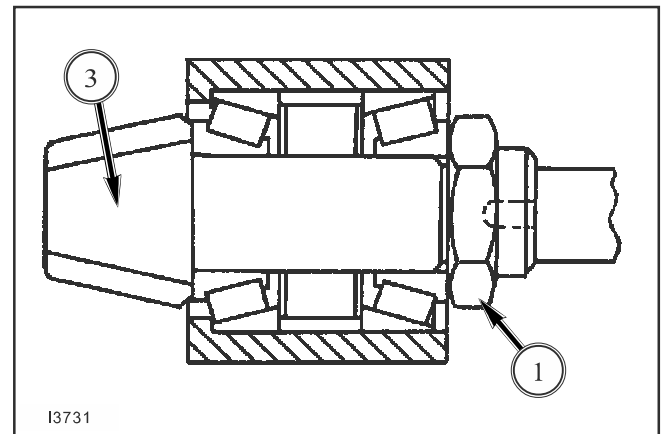


FIG. 6A-14

#### Inspection

Visually check the bearing surfaces of the bevel pinion and ring gear teeth.

*NOTE: The bevel pinion and the ring gear should be replaced as a pair.*

Seriously worn or damaged parts should be replaced.

#### Reassembly

Reassemble the parts in reverse order of disassembly, following these instructions.

Each friction surface should be coated with grease in advance.

The bevel pinion, 3, and the ring gear are a matched set, after a mesh adjustment performed at the factory. Consequently, when reassembling, be sure to match parts with the same reference number.

Leave the seal out until adjustments have been completed.

The front wheel drive pinion has two adjustments related to its support housing.

**Pre-Load On Bearings**

This is adjusted with nut on rear end of shaft. Specified starting torque - 5 - 7 kgf-cm (4.3 - 6 in.-lbs.).

**End Play Of Complete Assembly Inside Housing**

This is adjustable with shims. Specified end play - mm (in.) 0 - 0.2 (.008).

**PROCEED AS FOLLOWS:**

FIGS. 6A-15 and 6A-16: Install bearing cone, 1, on pinion shaft, making certain it is seated at pinion.

Install cups, 2, and spacer, 3.

Install cone, 4.

Install nut, 5, and tighten until all end play is removed between bearing cups, 2, and cones, 1, and 4.

Cups, 2, and spacer, 3, should still roll easily on cones, 1, and 4.

Install assembly in axle housing and install spacer, 6, and snap ring, 7.

Measure end play between snap ring, 7, and spacer, 6.

Remove snap ring and pinion assembly.

Install shims, evenly spaced, between spacer, 6, and cone, 2, at front, and bearing cone and housing, 8, to reduce end play to 0 - 0.2 mm (.000 - .008) with snap ring installed.

FIG. 6A-17: Check starting torque as shown with front seal removed. It should be 5 - 7 kfg-cm (4.3 - 6 in.-lbs.). This is equivalent to 5 - 7 kg (11 - 15.4 lbs.) force when measured using a pull-scale and string.

If starting torque is not correct it will be necessary to remove snap ring and pinion and readjust nut until correct starting torque is obtained.

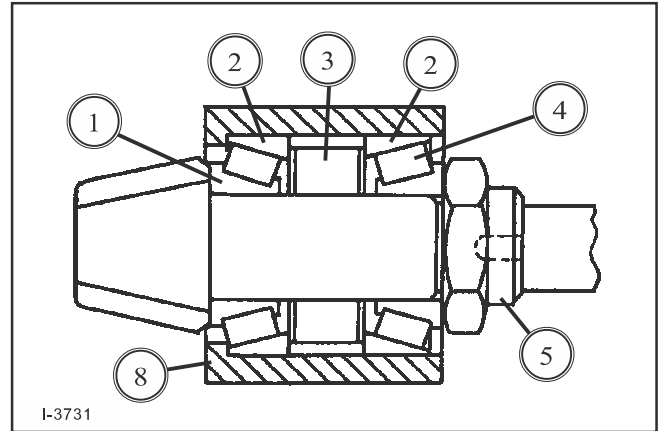


FIG. 6A-15

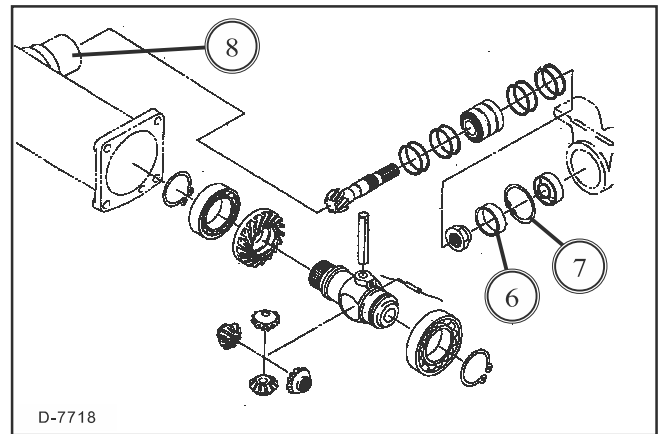


FIG. 6A-16

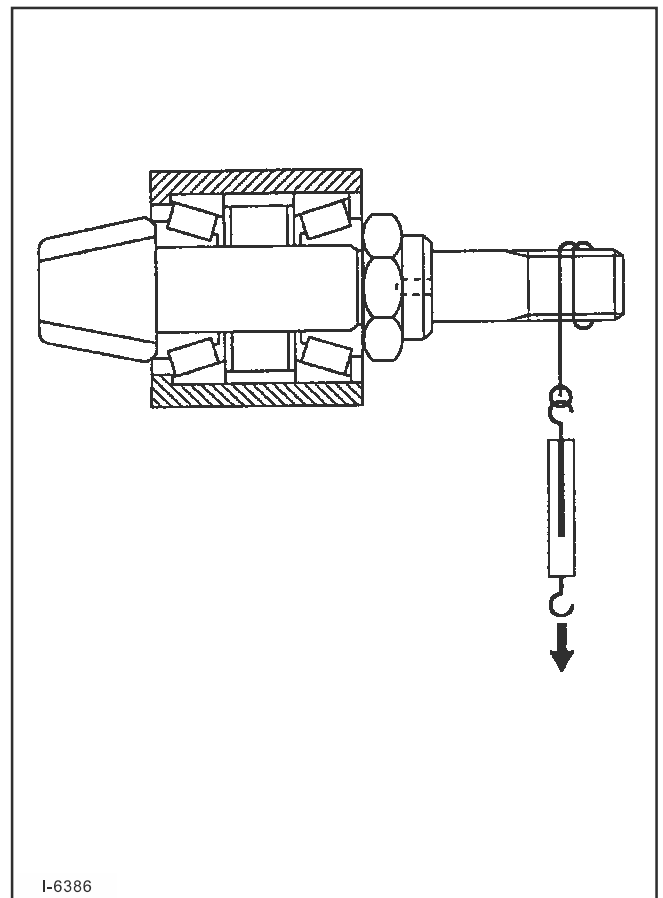


FIG. 6A-17