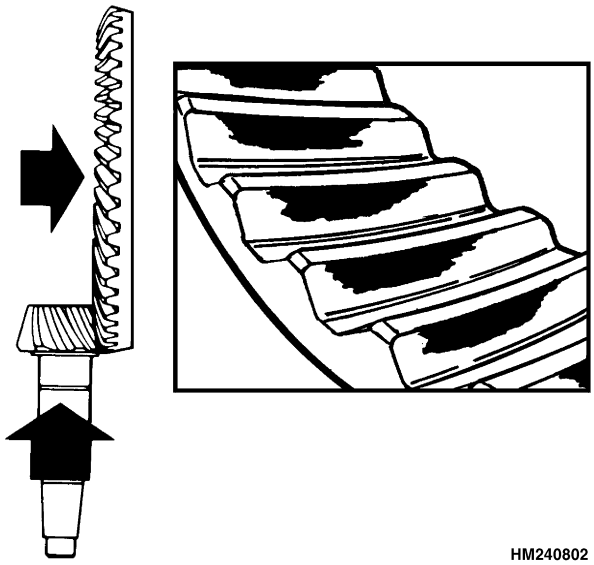
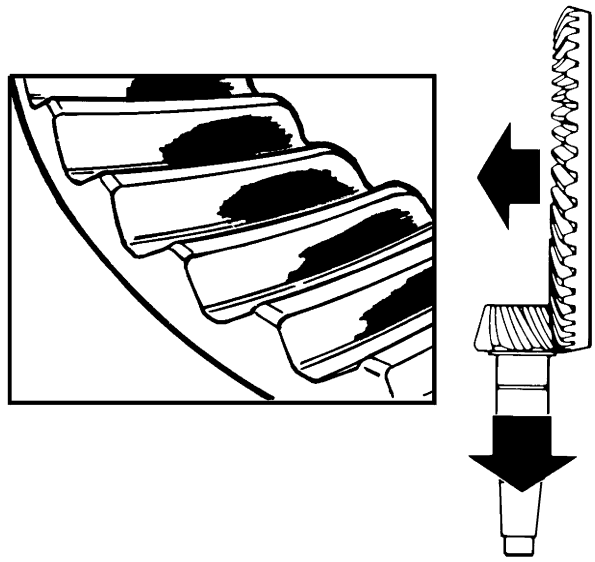
Table 2. Ring and Pinion Tooth Contact Adjustment (Continued)

Incorrect Tooth Contact	
The pinion is too far away from the center of the gear. Add shims to move pinion toward ring gear. Check that the clearance is correct. Some movement of ring gear away from pinion may be necessary.	 HM240802
The pinion is too close to the center of the ring gear. Remove shims to move pinion away from the ring gear. Check that the clearance is correct. Some movement of the ring gear toward the pinion may be necessary.	 HM240879

Thrust Screw, Install and Adjust

NOTE: Not all differential carrier models will have a thrust screw. Some may have a thrust block instead. Before installing and adjusting either the thrust screw or thrust block, install the adjusting ring locking device as described in Step 1.

CAUTION

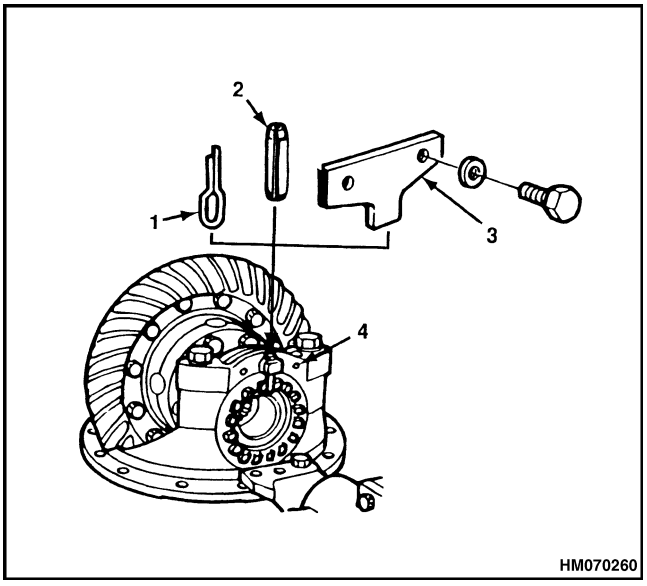
If the differential carrier has cotter pins, lock the adjusting rings only with cotter pins. If the differential carrier has dowel pins, reuse the dowel pins or lock the adjusting rings with cotter pins. Do not force a dowel pin into a cotter pin hole.

1. Use the following procedures to install the adjusting ring locking device:

a. Cotter Pins - Install cotter pins between lugs of the adjusting ring and through the boss of the bearing cap. Bend two ends of the cotter pin around the boss. See Figure 53.

b. Dowel Pins - Install dowel pins through the boss of the bearing cap until dowel pin is between lugs of the adjusting ring. Use a drift and hammer to install dowel pin. See Figure 53.

c. Lock Plate - Install lock plate on bearing cap so that the tab is between lugs of the adjusting ring. Install two capscrews that hold the lock plate to the bearing cap. Tighten capscrews to 28 to 35 N•m (21 to 26 lbf ft). See Figure 53.



1. COTTER PIN
2. DOWEL PIN
3. LOCK PLATE
4. THREADED HOLES FOR LOCK PLATE

Figure 53. Adjusting Ring Installation

2. If the unit has a thrust block, tighten the adjustment screw. The thrust block must be tight against the ring gear. Turn the adjustment screw 90 degrees counterclockwise and tighten the jam nut. The clearance between the thrust block and ring gear will be 0.25 to 0.38 mm (0.010 to 0.015 in.).

3. On H6.00-7.00XL (H135-155XL, H135-155XL_2) units, install thrust screw until it seats against ring gear. Set the clearance by turning thrust screw counterclockwise 180 degrees. Tighten the jam nut to the specification shown in Specifications, Table 7.

4. For early model H6.00-7.00XL (H135-155XL) (F006) units, the correct clearance between the thrust screw and the ring gear is 0.635 to 0.889 mm (0.025 to 0.035 in.). For later model H6.00-7.00XL (H135-155XL, H135-155XL_2) (F006, G006) units, the correct clearance between the thrust screw and the ring gear is 0.65 to 1.14 mm (0.025 to 0.045 in.).

INSTALL

Differential Assembly Into Axle Housing, Install

NOTE: For correct torque values for the fasteners used in this installation, see Specifications, Table 7. For general location of the fasteners, see Figure 55.

NOTE: Some of the parts described below are not found on some differential carrier models. See Figure 1.

1. Use Loctite Sealant No. 504 or silicone RTV sealant on the flange of the differential assembly housing.

2. Install the differential assembly in the axle housing. Tighten the nuts or capscrews. See Specifications, Table 7 for torque values.

3. Do the following as required:

a. On units with air operated disc brakes, install mounting brackets for slack adjusters. Install the air chamber rod pins and the cotter pin in the splined coupling.

b. On units with hydraulic disc brakes, install the parts of the brake as described in the **Brake** section for your unit. Connect the drive shaft and tighten the capscrews at the yoke to 120 N•m (90 lbf ft).

c. On H7.00-12.50H (H150-257H) units, assemble the axle. Install the axle in the lift truck if it was removed. Connect the drive shaft. Use a 11 mm (0.4375 in.) spacer between the speed reducer gear and the pinion nut. Use a new nut and tighten the nut to 1342 to 1790 N•m (990 to 1320 lbf ft) without lubricant.