

level checks are not required. At each engine oil change however, the exterior surfaces of the axle assembly should be inspected for evidence of gear oil leakage. Perform a fluid level check to confirm any suspected leakage. When this check is made with the car in a level position, supported by the suspension, on an Axle or Wheel Type Hoist or on the ground, the fluid level should be between the bottom of the filler plug opening and a point 1/4 inch (6.4 mm) below the filler plug opening.

## SERVICE PROCEDURES

### AXLE SHAFT AND BEARINGS

**CAUTION:** It is absolutely necessary that anytime an axle is serviced, and the axle shaft is loosened and removed, both brake support plate gaskets and the inner axle shaft oil seal must be replaced.

**CAUTION:** Under no circumstances should rear axle bearing cones, cups, bores or journals be subjected to heating with a torch, beating with a hammer or any other abnormal abuse, as permanent damage may result. Proper removers and installers are available and their use is highly recommended.

#### Removal and Disassembly

(1) Raise vehicle to a good desirable working height and install jack stands.

(2) Remove wheel cover and wheel and tire assembly. Remove brake drum.

Clean all dirt and foreign material from area of housing cover.

(3) Loosen housing cover and drain lubricant from rear axle and proceed to remove cover.

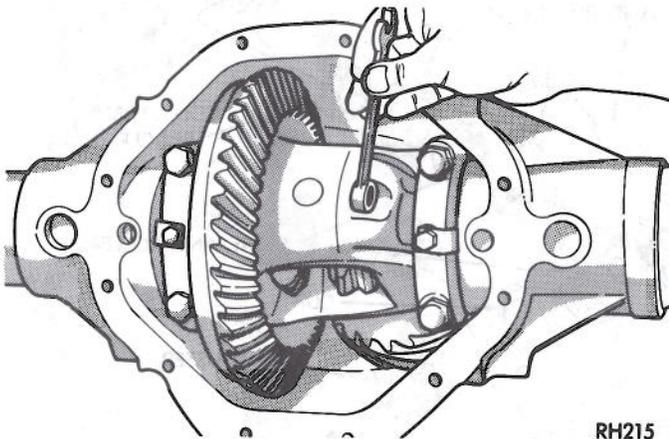


Fig. 3—Removal or Installation of Differential Pinion Shaft Lock Pin

When the fluid level check is made with the vehicle on a frame contact type hoist, with the axle hanging free, the fluid level should not be lower than the bottom of the filler plug opening. Confirmed leakage should be repaired as soon as possible!

Should the rear axle become submerged in water, the lubricant must be changed immediately to avoid the possibility of early axle failure resulting from contamination of the lubricant by water drawn into the vent hole.

(4) Turn differential case to make differential pinion shaft lock screw accessible and remove lock screw and pinion shaft (Fig. 3).

(5) Push axle shaft toward center of vehicle and remove the "C" locks from recessed groove of axle shaft (Fig. 4).

(6) Remove axle shaft from housing being careful not to damage the straight roller type axle shaft bearing which will remain in the rear axle housing.

(7) Inspect the axle shaft bearing surfaces for signs of brinnelling, spalling or pitting. If any of these conditions are present both the shaft and the bearing should be replaced. The normal bearing contact on the shaft will be a dull gray and may appear lightly dented.

(8) Remove axle shaft seal from housing bore.

(9) To remove the axle shaft bearing from axle housing (Fig. 5), use Tool C-4167. Attach Tool C-637 to end of selected remover, using a slide hammer motion, remove axle shaft bearing and inspect and discard if axle shaft or bearing shows

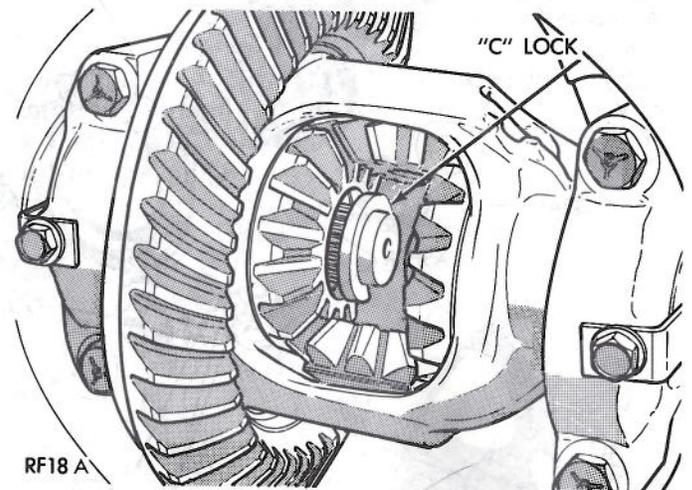


Fig. 4—Removal or Installation of Axle Shaft "C" Locks