

J8902-16

**Fig. 35 YOKE BEARING CAP REMOVAL**

- 1 - LARGE-DIAMETER SOCKET
- 2 - VISE
- 3 - SMALL-DIAMETER SOCKET

(6) Tighten vise jaws, to force bearing cap into the socket (receiver).

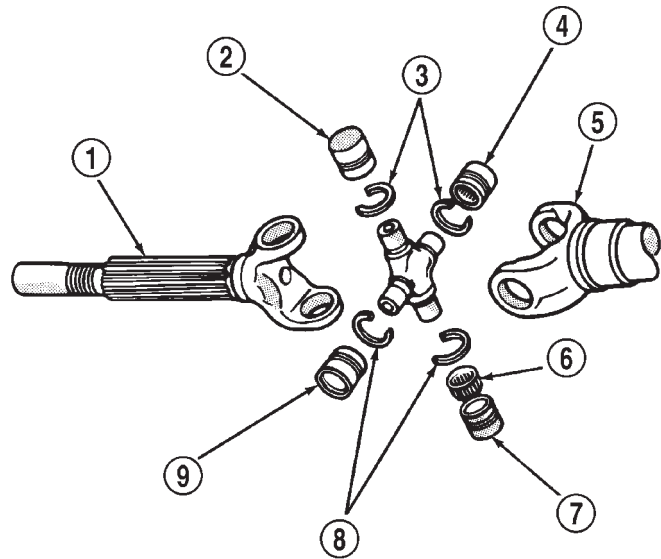
(7) Release vise jaws. Remove sockets and bearing cap forced out of the yoke.

(8) Repeat above procedure for the remaining bearing cap and remove cross from propeller shaft yoke.

## INSTALLATION

**CAUTION:** Keep cross and bearing cap straight during installation. Failure to heed caution may result in damage.

(1) Pack bearing caps 1/3 full of wheel bearing lubricant (Fig. 36). Apply extreme pressure (EP), lithium-base lubricant to aid in installation.



J8902-15

**Fig. 36 AXLE SHAFT OUTER U-JOINT**

- 1 - SHAFT YOKE
- 2 - BEARING CAP
- 3 - SNAP RINGS
- 4 - BEARING CAP
- 5 - SPINDLE YOKE
- 6 - BEARING
- 7 - BEARING CAP
- 8 - SNAP RINGS
- 9 - BEARING CAP

(2) Position cross in the yoke. Insert seals and bearings, then tap bearing caps into the yoke bores far enough to hold spider in position.

(3) Place socket (driver) against one bearing cap. Position yoke with the socket in a vise.

(4) Tighten vise to force bearing caps into the yoke. Force the caps enough to install retaining clips.

(5) Install bearing cap retaining clips.

(6) Install axle shaft.

## SEAL - PINION

### REMOVAL

(1) With vehicle in neutral, position vehicle on hoist.

(2) Remove brake rotors and calipers.

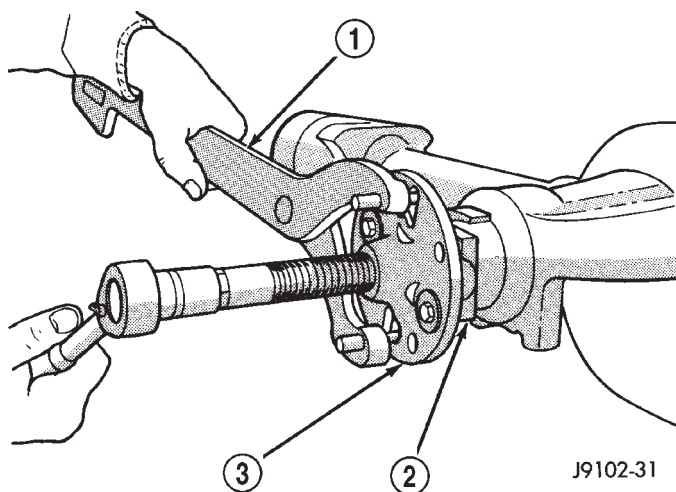
(3) Remove propeller shaft from the yoke.

(4) Rotate pinion gear three or four times.

(5) Record rotating torque of the pinion gear with an inch pound torque wrench, for installation reference.

(6) Hold pinion yoke with Wrench 6958 and remove pinion nut and washer.

(7) Remove pinion yoke with Remover C-452 and Wrench C-3281 (Fig. 37).



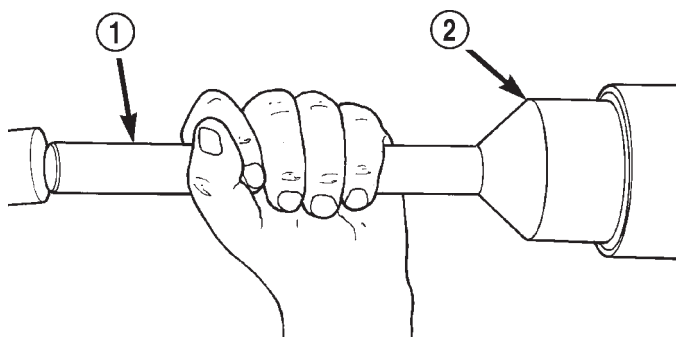
**Fig. 37 PINION YOKE REMOVER**

- 1 - WRENCH
- 2 - PINION YOKE
- 3 - REMOVER

(8) Remove seal with a pry tool or a slide hammer mounted screw.

### INSTALLATION

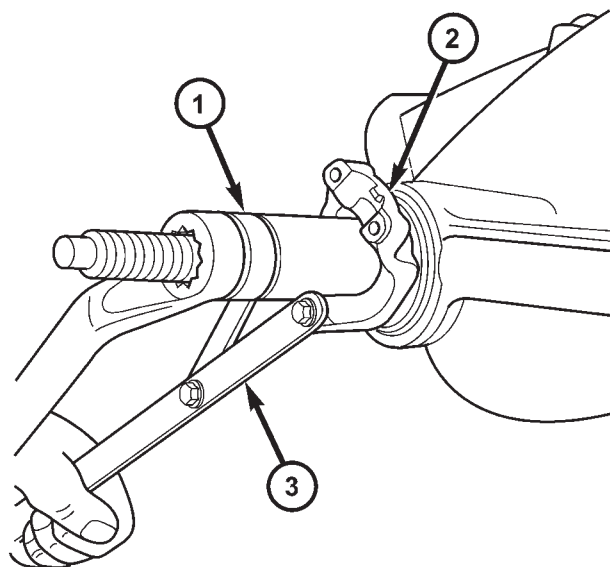
(1) Apply a light coating of gear lubricant on the lip of pinion seal. Install seal with an appropriate installer (Fig. 38).



**Fig. 38 PINION SEAL INSTALLER**

- 1 - HANDLE
- 2 - INSTALLER

(2) Install yoke on pinion gear with Installer W-162-D, Cup 8109 and Holder 6958 (Fig. 39).



**Fig. 39 PINION YOKE INSTALLER**

- 1 - INSTALLER
- 2 - PINION YOKE
- 3 - SPANNER WRENCH

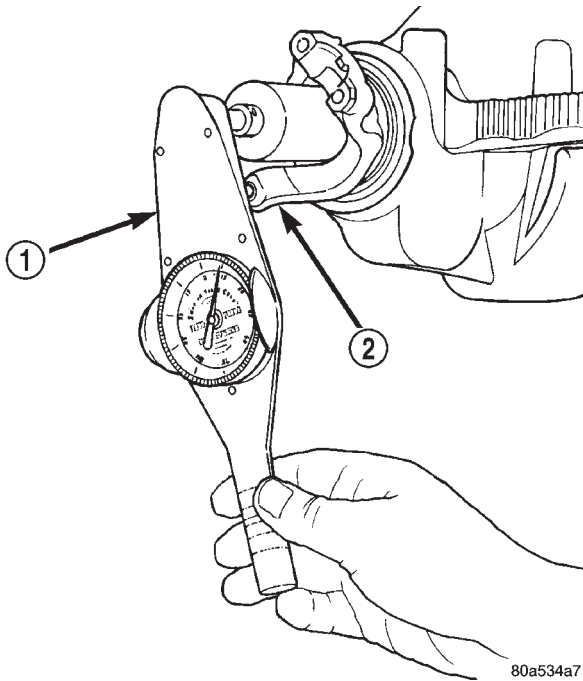
**CAUTION:** Do not exceed the minimum tightening torque when installing the pinion yoke retaining nut at this point. Failure to heed caution may result in damage

(3) Install pinion washer and a **new** nut on the pinion gear shaft.

**NOTE:** Tighten nut only enough to remove the shaft end play.

(4) Tighten pinion nut to 217 N·m (160 ft. lbs.).

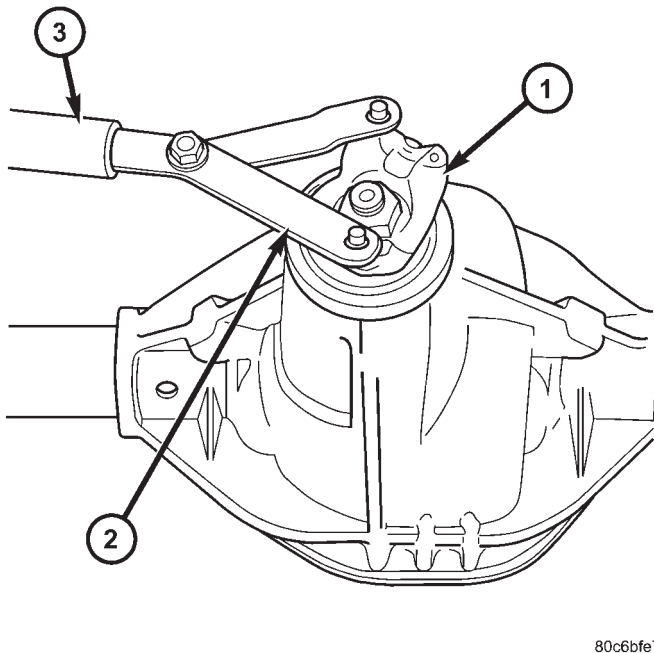
(5) Rotate pinion shaft using an inch pound torque wrench. Rotating torque should be equal to the reading recorded during removal, plus an additional 0.56 N·m (5 in. lbs.) (Fig. 40).



**Fig. 40 PINION ROTATING TORQUE**

- 1 - TORQUE WRENCH  
2 - PINION YOKE

(6) If rotating torque is low, use Spanner 6958 (Fig. 41) to hold the pinion yoke and tighten pinion shaft nut in 6.8 N·m (5 ft. lbs.) increments until proper rotating torque is achieved.



**Fig. 41 YOKE HOLDER**

- 1 - PINION YOKE  
2 - SPANNER WRENCH  
3 - PIPE

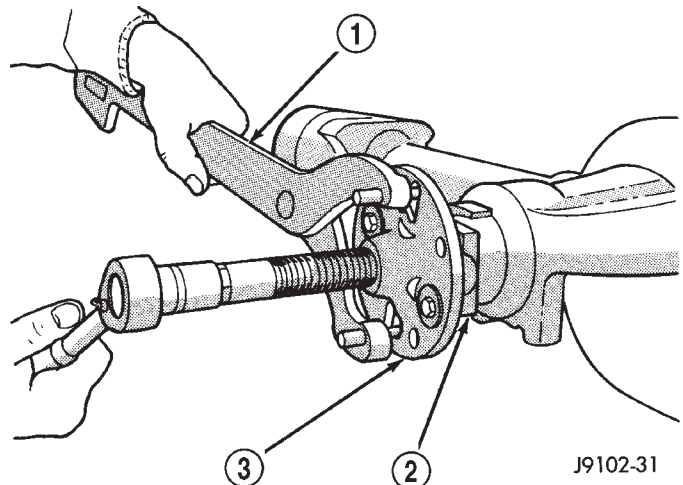
(7) Install propeller shaft with reference marks aligned.

(8) Install brake rotors and calipers.

## SPACER - COLLAPSIBLE

### REMOVAL

- (1) With vehicle in neutral, position vehicle on hoist.
- (2) Remove brake rotors and calipers.
- (3) Remove propeller shaft from axle yoke.
- (4) Rotate pinion gear three or four times.
- (5) Record rotating torque of the pinion gear with an inch pound torque wrench.
- (6) Hold pinion yoke with Spanner Wrench 6958 and remove pinion nut and washer.
- (7) Remove pinion yoke with Remover C-452 and Flange Wrench C-3281 (Fig. 42).



**Fig. 42 PINION YOKE REMOVER**

- 1 - WRENCH  
2 - PINION YOKE  
3 - REMOVER

(8) Remove pinion seal with a suitable pry tool or a slide hammer mounted screw.

(9) Remove front pinion bearing off pinion gear shaft, with a pair of pick tools. If bearing becomes bound on the shaft, lightly tap the end of the pinion gear with a rubber hammer.

(10) Remove collapsible spacer.

### INSTALLATION

- (1) Install **new** collapsible spacer on pinion shaft.
- (2) Install front pinion bearing.
- (3) Apply a light coating of gear lubricant on the lip of pinion seal and install seal with an appropriate installer (Fig. 43).