

CLOSED STEERING KNUCKLES

Chrysler Corp.
Ford Motor Co.
General Motors
International Harvester
Jeep

DESCRIPTION

Front axle on all four-wheel drive vehicles is a live axle unit with hypoid driving gears and steering knuckles. Drive is full floating through axle shafts which revolve in steering knuckles. Closed knuckles are mounted to axle yoke with tapered bearings instead of ball joints. Knuckles are sealed to axle housing to prevent dirt and moisture from entering axle assembly.

LUBRICATION

Drain and refill housing every 30,000 miles using SAE 140 gear lubricant.

OVERHAUL

DISASSEMBLY

1) Remove wheel, brake drum (disc brake assembly) and wheel hub. See *Locking Hubs in this Section*. Remove brake

backing plate and wheel spindle, then slide axle shaft assembly out through steering knuckle.

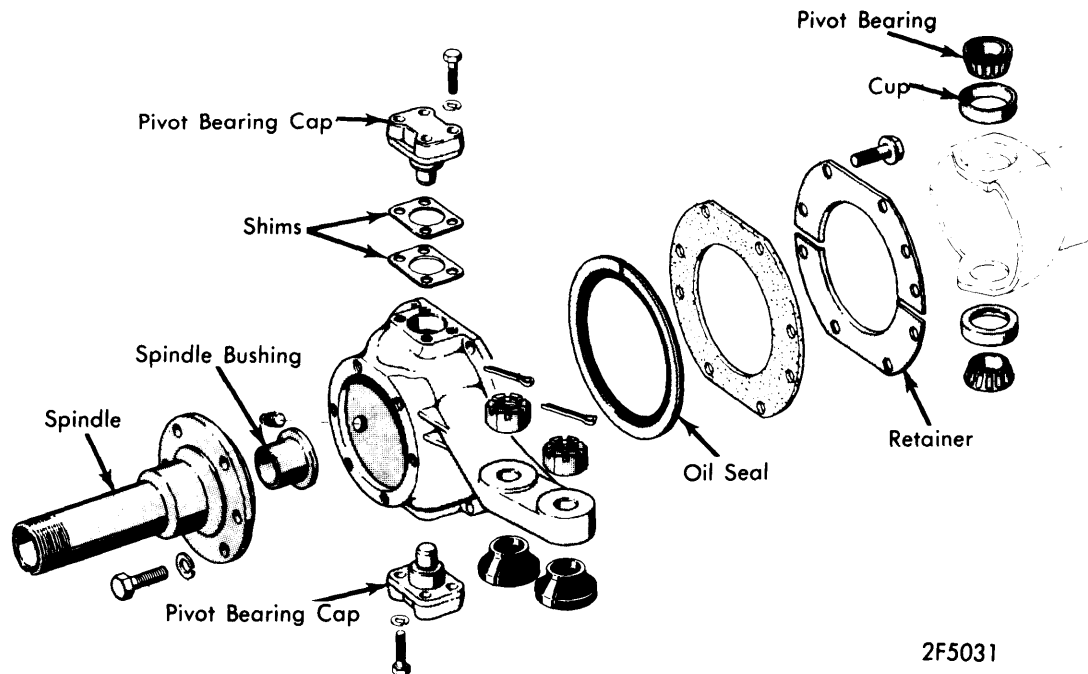
2) Disconnect steering connecting rods at steering knuckle and remove oil seal retainer attaching bolts from rear of knuckle. Remove cap screws holding upper and lower pivot pin bearing caps and remove caps. Slide steering knuckle off end of axle housing and remove oil seal, gasket and seal retainer.

3) Remove bearings and seals from hub, spindle and knuckle as necessary. Inspect all machined parts for wear or damage. Check pivot bearing caps and pivot bearings for damage or excessive play. Replace defective parts as necessary.

REASSEMBLY

1) Install and tighten lower pivot bearing and cap. Install upper pivot bearing and cap with shim(s) removed during disassembly under upper cap. Attach suitable spring scale to tie rod end hole in steering knuckle and measure pivot bearing preload. If preload is correct, required pull should be 12-18 lbs. Add shims to decrease preload or subtract shims to increase preload until correct preload is obtained.

2) Install oil seal, gasket and oil seal retainer. Position axle shaft assembly in housing, making sure splines on shaft engage side gears in differential. Install brake backing plate, wheel spindle and steering connecting rods. Install brake assembly and wheel hub and adjust wheel bearings.



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