

(3) Adjust toe by turning tie rod sleeves. To avoid a binding condition in either tie rod assembly, rotate both tie rod ends in direction of sleeve travel during adjustment (Fig. 7). This will ensure that both ends will be in the center of their travel when tightening sleeve clamps. Each wheel should be aligned

to one-half the total specification to insure that the steering wheel will be centered. Shut off engine.

(4) Position sleeve clamps so ends do not locate in the sleeve slot, then tighten clamp bolts as specified. Be sure clamp nut or bolt does not project above top of sleeve.

INDEPENDENT FRONT SUSPENSION TWO-WHEEL-DRIVE

INDEX

	Page		Page
Coil Spring	7	Tie Rod End	11
Lower Ball Joint	8	Steering Knuckle	10
Lower Control Arm	8	Sway Bar	7
Lower Control Arm Bushing	9	Upper Ball Joint	10
Service Procedures	6	Upper Control Arm	9
Hub and Bearing	6		

SERVICE PROCEDURES

HUB AND BEARINGS

(1) Block brake pedal in the up position. Raise vehicle and remove wheel and tire assembly. Remove mounting bolts from caliper.

(2) Separate caliper from rotor. Support caliper out of the way. Do not allow caliper to hang by hydraulic hose.

(3) Remove grease cap, cotter pin, nut lock, nut, thrust washer, and outer wheel bearing.

(4) Carefully slide rotor from spindle (Fig. 1). Do not drag seal or inner bearing over steering knuckle thread (thread, bearing, and oil seal may be damaged). Remove oil seal and inner bearing.

(5) Thoroughly clean bearings and interior of

rotor, removing all old grease. To clean bearings, soak them in cleaning solvent. Strike the flat of the bearings against a hardwood block several times; immersing the bearings in solvent between the blows to jar and wash old particles of hardened grease from bearing. Repeat this operation until bearings are clean. Dry the bearings with compressed air but do not spin them. After cleaning, oil the bearings with engine oil. Turn the bearings slowly while applying pressure to test them for pitting and roughness. Replace all worn or defective bearings. If bearing shows pitting or roughness, replace cups and bearing. If bearings are suitable for further use, remove engine oil, pack with Multi-Purpose NLGI, Grade 2 EP grease or equivalent, and place them in a clean covered container until ready for installation. If a bearing packer is not available, hand pack grease into all cavities between cage and rollers.

(6) If bearings and cups are to be replaced, remove cups with a brass drift or suitable remover.

(7) Replace bearing cups with appropriate installing tool.

(8) Install inner bearing in grease coated rotor hub and install new grease seals with a seal installer.

(9) Coat hub cavity and hub cap with grease.

(10) Before installing rotor assembly, inspect steering knuckle bearing and seal surfaces for burrs or roughness.

(11) Smooth all rough surfaces. Coat with Multi-Purpose NLGI, Grade 2 EP grease or equivalent.

(12) Carefully slide rotor assembly onto steering knuckle. Do not drag seal or inner bearing over steering knuckle thread (thread, bearing and oil seal may be damaged). Install outer bearing, washer and nut. Tighten nut to 360-480 in. lbs. (41-54 N·m), while rotating wheel. Stop rotation

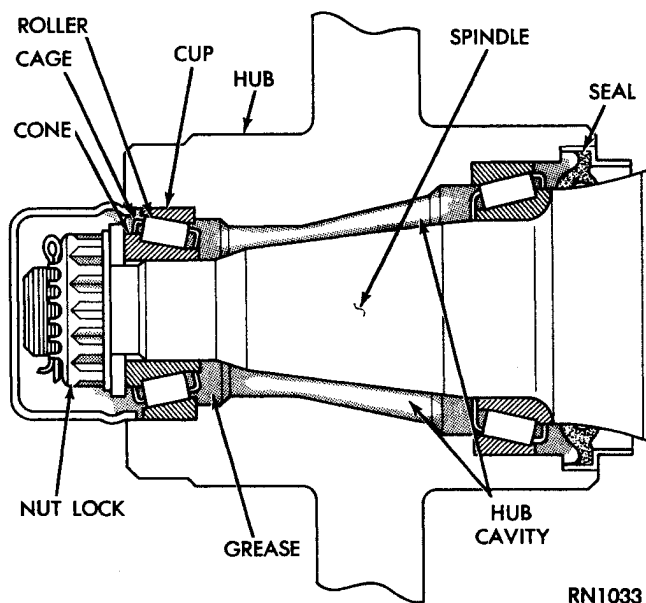


Fig. 1—Front Hub Area (Typical)

and back off the nut with wrench to completely release bearing preload. Next, finger tighten nut and install locknut and cotter key. The resulting adjustment should be .0001-.003 inch end play.

(13) Clean grease cap, coat inside with wheel bearing lubricant. **DO NOT FILL** and install.

(14) Position caliper over rotor and install and tighten mounting bolts. See, "Tightening Reference" for proper torque.

(15) Install and tighten wheel and tire assembly. See, "Tightening Reference" for proper torque. Lower vehicle and test vehicle operation.

COIL SPRING (Fig. 2)

Removal

(1) Raise vehicle on hoist and remove wheel and tire assembly.

(2) Remove shock absorber and loosely install spring compressor Tool DD-1278. **This will prevent the coil spring from sliding out under compression when the lower control arm is lowered.**

(3) Disconnect sway bar end link assembly from control arm.

(4) Place (2) jack stands under control arm be-

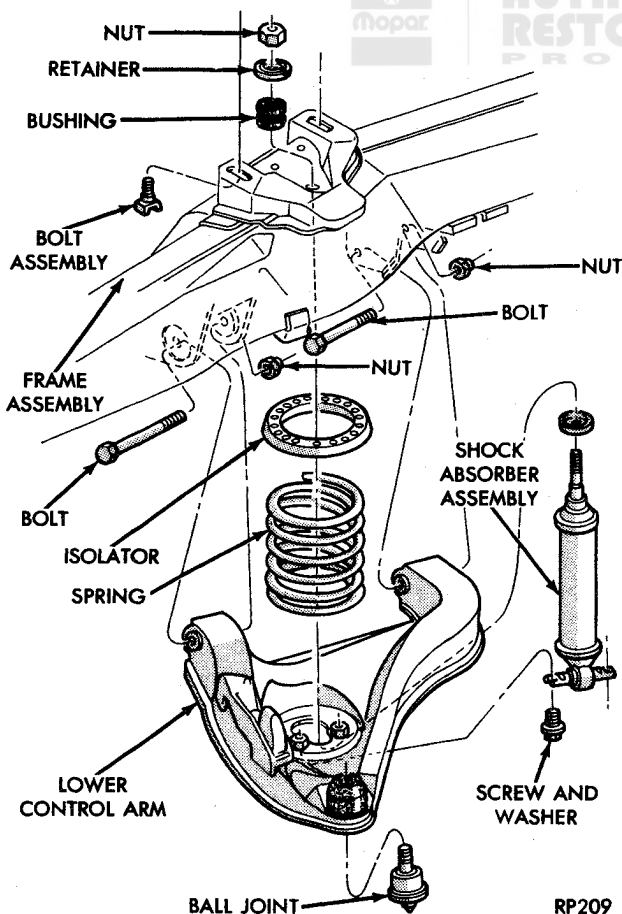


Fig. 2—Coil Spring and Related Parts

low frame, they should straddle the control arm bushings.

(5) Remove the control arm mounting bolts from the frame assembly.

(6) Slowly lower jack stands until tension on coil spring is relieved. Remove the spring compressor tool, coil spring and isolator pad.

Installation

(1) Tape isolator pad to spring and position spring on control arm. Install spring compressor tool to frame rail and through spring.

(2) Raise jack stands alternately until the spring assembly is properly seated and control arm is aligned with the mounting bracket on the frame assembly.

(3) Install the control arm mounting bolts and tighten front nut to 130 ft. lbs. (176 N·m) and the rear nut to 80 ft. lbs. (108 N·m).

(4) Remove spring compressor tool and jack stands.

(5) Install sway bar link assembly.

(6) Extend shock absorber fully, install retainer on shock absorber. Check upper bushing and sleeve to make sure they are in proper position not worn or broken.

(7) Carefully guide shock absorber up through coil spring and bushing. Install top retainer and nut and tighten to 25 ft. lbs. (34 N·m).

(8) Align lower end of shock absorber and install mounting bolts. Tighten to 200 in. lbs. (23 N·m).

(9) Install wheel and tire assembly and lower vehicle to ground.

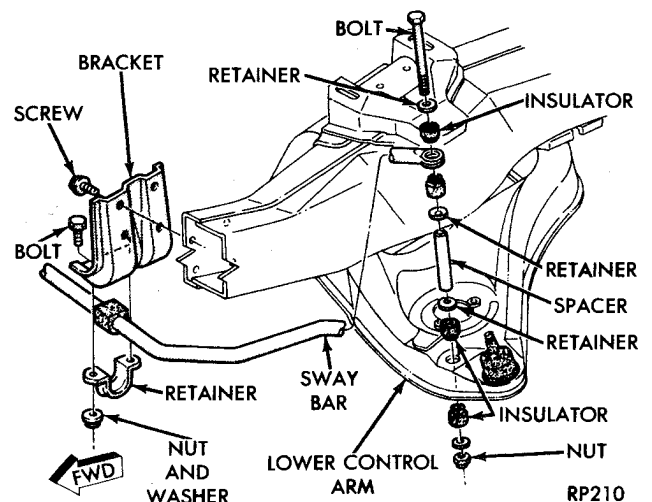


Fig. 3—Sway Bar and Related Parts

SWAY BAR (Fig. 3)

Removal

(1) Disconnect bar at each end link. Remove