

SUSPENSION

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ALIGNMENT

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GENERAL INFORMATION

WHEEL ALIGNMENT

Wheel alignment involves the correct positioning of the wheels in relation to the vehicle. The positioning is accomplished through suspension and steering linkage adjustments. An alignment is considered essential for efficient steering, good directional stability and to maximize tire wear. The most important measurements of front end alignment are caster, camber and toe position.

NOTE: Routine inspection of the front suspension and steering components is a good preventative maintenance practice. Inspection also helps to ensure safe operation of the vehicle.

- **CASTER** is the forward or rearward tilt of the steering knuckle from vertical. Tilting the top of the knuckle rearward provides positive caster. Tilting the top of the knuckle forward provides negative caster. Caster is a directional stability angle. This angle enables the front wheels to return to a straight ahead position after turns.
- **CAMBER** is the inward or outward tilt of the wheel relative to the center of the vehicle. Tilting the top of the wheel inward provides negative camber. Tilting the top of the wheel outward provides positive camber. Incorrect camber will cause wear on the inside or outside edge of the tire. The angle is not

- adjustable, the damaged component(s) must be replaced to correct mis-alignment.
- **WHEEL TOE POSITION** is the difference between the leading inside edges and trailing inside edges of the front tires. Incorrect wheel toe position is the most common cause of unstable steering and uneven tire wear. The wheel toe position is the **final** front wheel alignment adjustment.
 - **STEERING AXIS INCLINATION ANGLE** is measured in degrees and is the angle that the steering knuckles are tilted. The inclination angle has a fixed relationship with the camber angle. It will not change except when a spindle or ball stud is damaged or bent. The angle is not adjustable, the damaged component(s) must be replaced to correct mis-alignment.

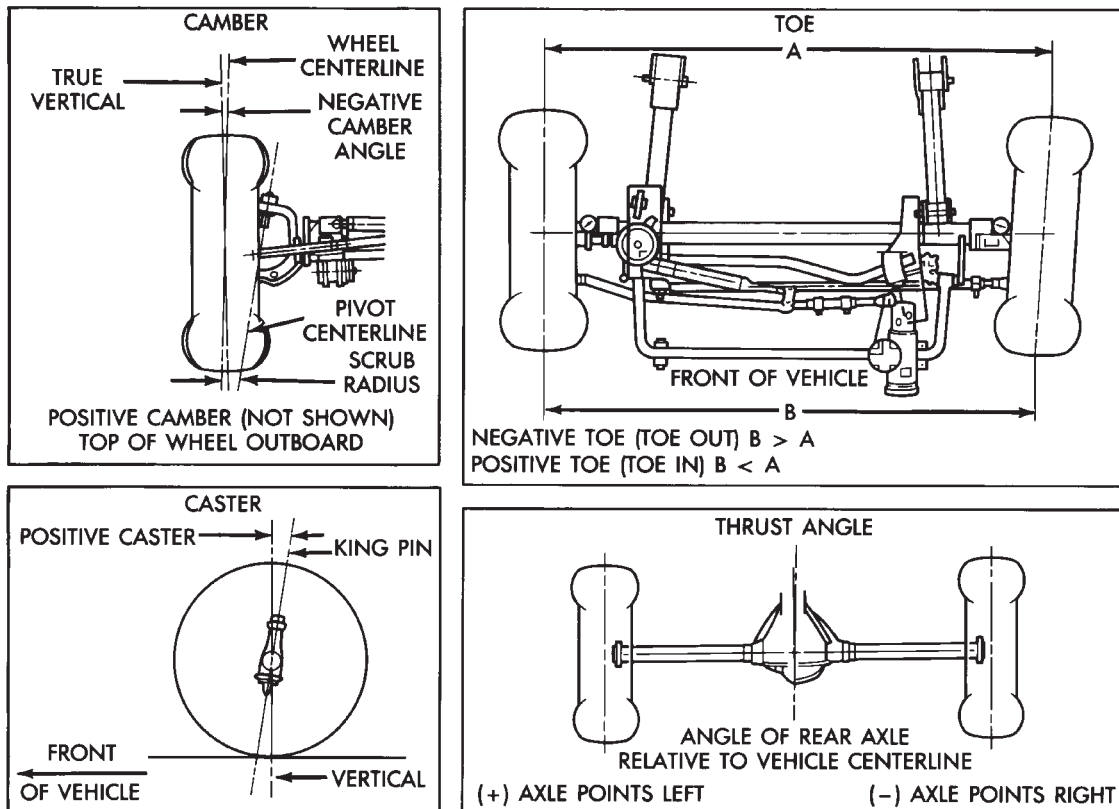
WARNING: Do not attempt to modify any suspension or steering component by heating and bending.

SERVICE PROCEDURES

PRE-ALIGNMENT INSPECTION

Before starting wheel alignment, the following inspection and necessary corrections must be completed. Refer to Suspension and Steering System Diagnosis Chart for additional information.

SERVICE PROCEDURES (Continued)



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Wheel Alignment Measurements

(1) Tires with the same recommended air pressure, size, and tread wear. Refer to Group 22, Wheels and Tires for diagnosis information.

(2) Inspect front wheel bearings for wear or adjustment.

(3) Inspect front wheels for excessive radial, lateral runout and unbalance. Refer to Group 22, Wheels and Tires for diagnosis information.

(4) Inspect ball studs, linkage pivot points and steering gear for looseness, roughness, binding or a sticking condition. Refer to Group 19, Steering for additional information.

(5) Inspect suspension components for wear and noise. Check components for correct torque.

SERVICE PROCEDURES (Continued)

SUSPENSION AND STEERING SYSTEM DIAGNOSIS

CONDITION	POSSIBLE CAUSES	CORRECTION
FRONT END NOISE	1. Loose or worn front wheel bearings. 2. Loose or worn suspension bushings or components.	1. Adjust or replace wheel bearings. 2. Replace worn bushings or suspension components.
EXCESSIVE PLAY IN STEERING	1. Loose or worn front wheel bearings. 2. Loose or worn steering components. 3. Loose or worn steering gear.	1. Adjust or replace wheel bearings. 2. Replace loose or worn steering components. 3. Adjust or replace steering gear.
FRONT WHEELS SHIMMY	1. Loose or worn front wheel bearings. 2. Loose or worn suspension bushings or components. 3. Tires worn or out of balance. 4. Alignment.	1. Adjust or replace wheel bearings. 2. Replace worn bushings or suspension components. 3. Replace or balance tires as needed. 4. Align front end.
VEHICLE INSTABILITY	1. Loose or worn front wheel bearings. 2. Alignment. 3. Loose or worn suspension bushings or components. 4. Weak or broken spring. 5. Tire pressure.	1. Adjust or replace wheel bearings. 2. Align front end. 3. Replace worn bushings or suspension components. 4. Replace weak or broken spring. 5. Correct tire pressure.
DIFFICULT STEERING	1. Tire pressure. 2. Alignment. 3. Steering gear or pump.	1. Correct tire pressure. 2. Align front end. 3. Adjust or replace steering gear. Test and repair pump as needed.
VEHICLE PULLS TO ONE SIDE	1. Tire pressure. 2. Alignment. 3. Loose or worn suspension bushings or components. 4. Weak or broken spring. 5. Brake pull.	1. Correct tire pressure. 2. Align front end. 3. Replace worn bushings or suspension components. 4. Replace weak or broken spring. 5. Repair brakes.

SERVICE PROCEDURES (Continued)

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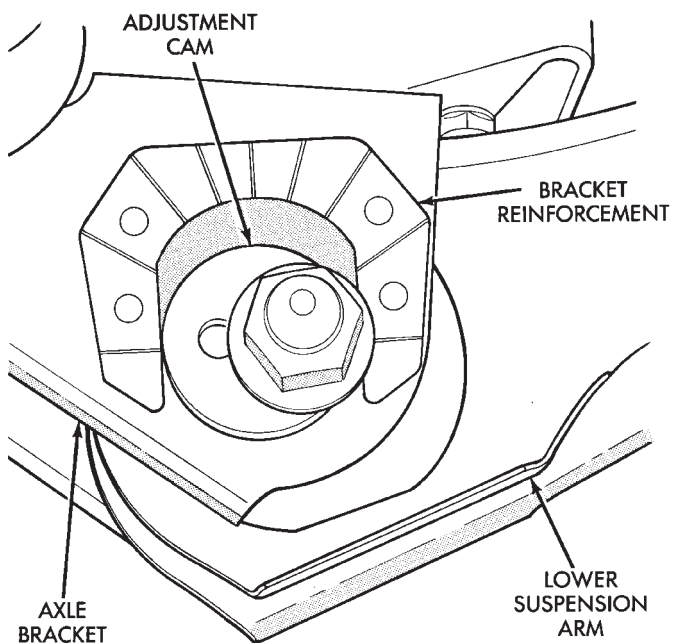


Fig. 1 Cam Adjuster

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TOE POSITION

The toe position adjustment should be the last adjustment made.

NOTE: The engine must remain running during the entire toe position adjustment.

- (1) Apply parking brakes.
- (2) Start the engine and turn wheels both ways before straightening the steering wheel. Center and secure the steering wheel.
- (3) Loosen the adjustment sleeve clamp bolts (Fig. 2).
- (4) Adjust the right wheel toe position with the drag link (Fig. 3) and (Fig. 4). Turn the sleeve until the right wheel is at the correct positive TOE-IN position. Position the clamp bolts as shown (Fig. 2) and tighten to 49N·m (36 ft. lbs.).

NOTE: Tighten clamp bolt nearest the pitman arm first. Make sure the toe setting does not change during clamp tightening.

- (5) Adjust the left wheel toe position with the tie rod. Turn the sleeve until the left wheel is within .05° TOE-IN position as the right wheel. Position the clamp bolts as shown (Fig. 2) and tighten to:

- Vehicles with 6 cyl engine: 27 N·m (20 ft. lbs.)
- Vehicles with 8 cyl engine: 49 N·m (36 ft. lbs.)

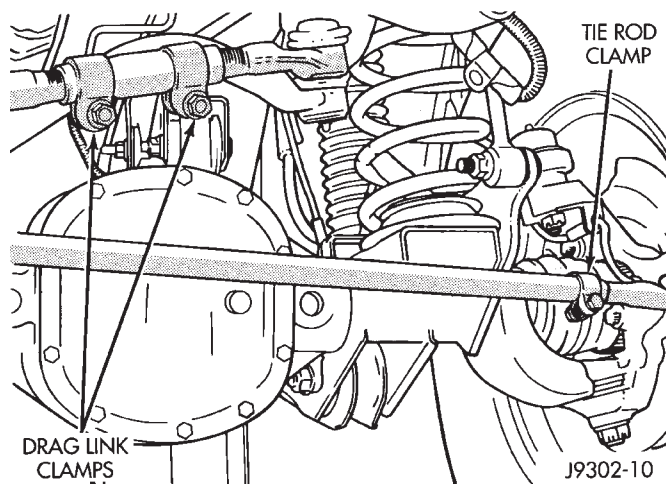


Fig. 2 Drag Link and Tie Rod Clamp

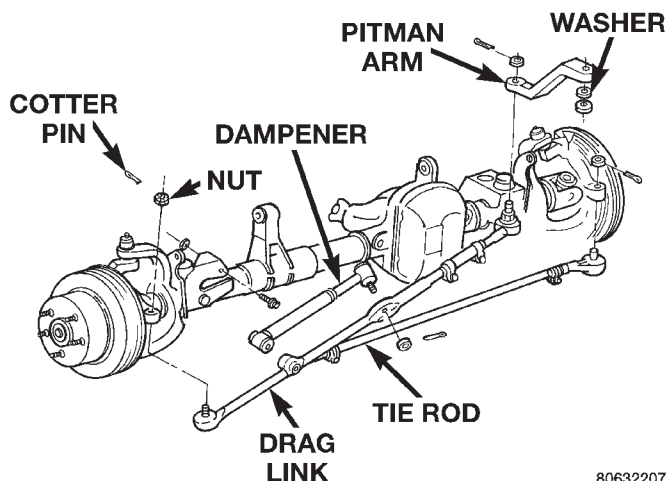


Fig. 3 Steering Linkage—6 Cylinder Engine

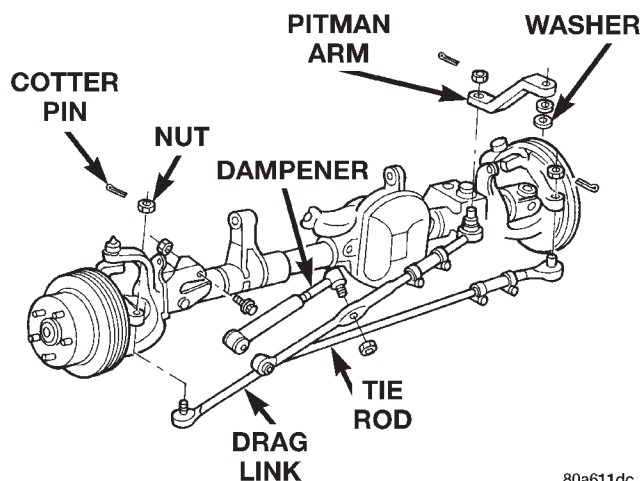


Fig. 4 Steering Linkage—8 Cylinder Engine

SERVICE PROCEDURES (Continued)

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NOTE: Tighten the clamp bolt furthest from the wheel first. Make sure the toe setting does not change during clamp tightening.

(6) Verify alignment specifications, then turn the engine off.

SPECIFICATIONS**ALIGNMENT***FRONT WHEELS*

ADJUSTMENT	PREFERRED	RANGE
CASTER	7°	6.5° to 7.5°
CAMBER (not adjustable)	NA	-1.13° to + 0.13°
TOE-IN (each wheel)	0.12°	0° to + 0.22°
Toe Differential Left to Right .05°		

REAR AXLE

ADJUSTMENT	SPECIFICATION
THRUST ANGLE (not adjustable)	± .25°
TOTAL TOE-IN (not adjustable)	0.00 to + 0.5°

FRONT SUSPENSION

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DESCRIPTION AND OPERATION

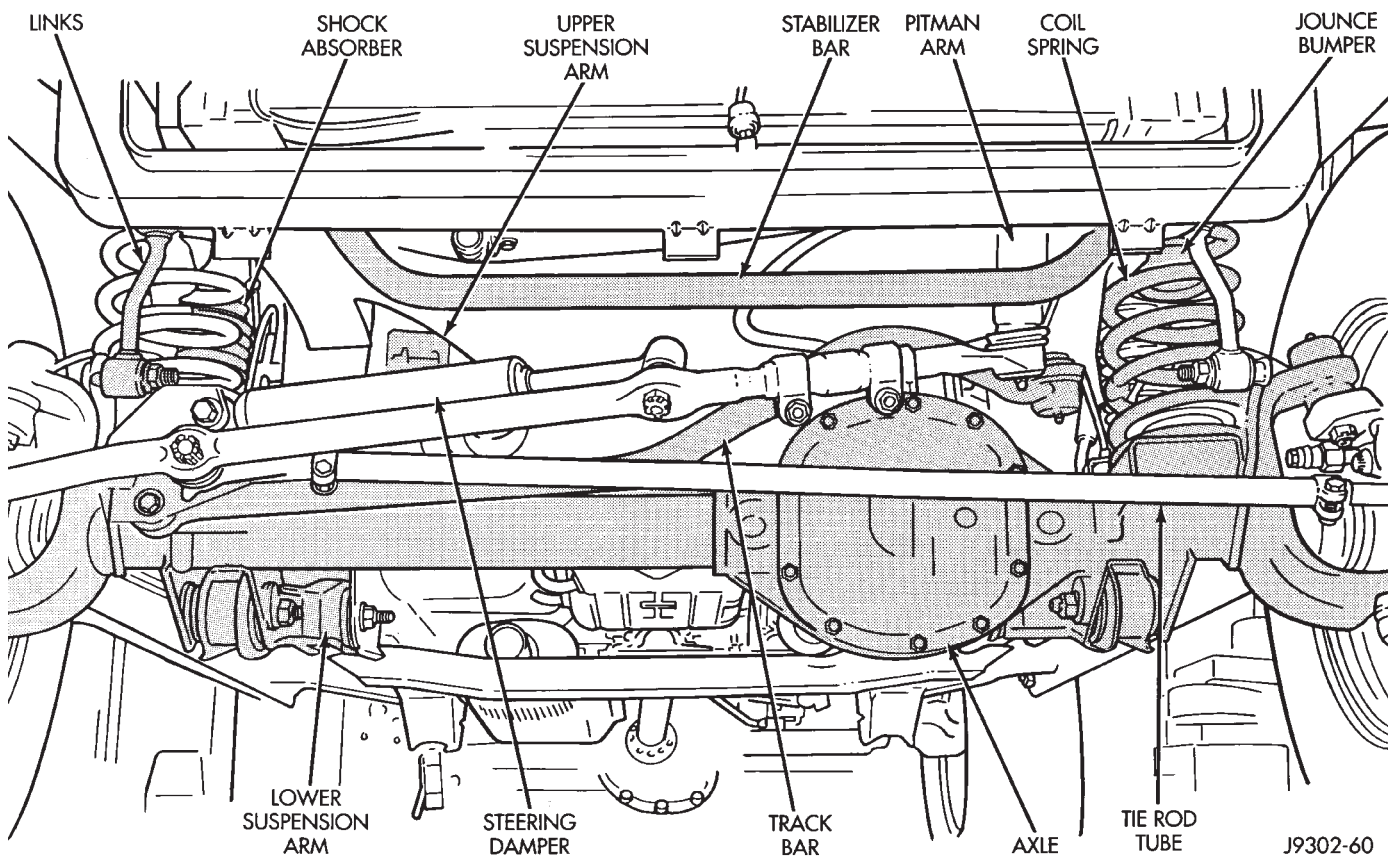
FRONT SUSPENSION

The Grand Cherokee front suspension is a link/coil design comprised of (Fig. 1);

- Drive axle (4WD), tube axle (2WD)
- Track bar
- Stabilizer bar
- Upper and lower suspension arms

- Coil springs
- Dual-action shock absorbers
- Jounce bumpers

Link/Coil Suspension: The link/coil suspension allows each wheel to adapt to different road surfaces without greatly affecting the opposite wheel. Wheels are attached to a hub/bearings which bolts to the knuckles. The hub/bearing is not serviceable and is replaced as a unit. Steering knuckles pivot on



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Fig. 1 Front Suspension

DESCRIPTION AND OPERATION (Continued)

replaceable ball studs attached to the axle tube yokes.

Shock Absorbers: The shock absorbers dampen jounce and rebound motion of the vehicle over various road conditions. The top of the shock absorbers are bolted to the body. The bottom of the shocks are bolted to the axle brackets.

Coil Springs: The coil springs control ride quality and maintain proper ride height. The coil springs mount up in the wheelhouse which is part of the unitized body bracket. A rubber doughnut isolator is located between the top of the spring and the body. The bottom of the spring seats on a axle pad and is retained with a clip.

Upper And Lower Suspension: The suspension arms use bushings to isolate road noise. The suspension arms are bolted to the frame and axle through the rubber bushings. The lower suspension arm uses cam bolts at the axle to allow for caster and pinion angle adjustment. The suspension arm travel is limited through the use of jounce bumpers in compression and shocks absorbers in rebound.

Stabilizer Bar: The stabilizer bar is used to control vehicle body roll during turns. The spring steel bar helps to control the vehicle body in relationship to the suspension. The bar extends across the front underside of the chassis and connects to the frame rails. Links are connected from the bar to the axle brackets.

Track Bar: The track bar is used to control front axle lateral movement. The bar is attached to a frame rail bracket with a ball stud and isolated with a bushing at the axle bracket.

NOTE: Periodic lubrication of the front suspension (steering) system components is required. Refer to Group 0, Lubrication And Maintenance for the recommended maintenance schedule.

CAUTION: Suspension components with rubber bushings should be tightened with the vehicle at normal height. It is important to have the springs supporting the weight of the vehicle when the fasteners are torqued. If springs are not at their normal ride position, vehicle ride comfort could be affected and premature bushing wear may occur. Rubber bushings must never be lubricated.

DIAGNOSIS AND TESTING

SHOCK DIAGNOSIS

A noise from a shock absorber may be caused by movement between mounting bushings and metal brackets or attaching components. This noise can

usually be stopped by tightening the attaching nuts. If the noise persists, inspect for damaged and worn bushings, and attaching components. Repair as necessary if any of these conditions exist.

The shock absorbers are not refillable or adjustable. If a malfunction occurs, the shock absorber must be replaced. To test a shock absorber, hold it in an upright position and force the piston in and out of the cylinder four or five times. The action throughout each stroke should be smooth and even.

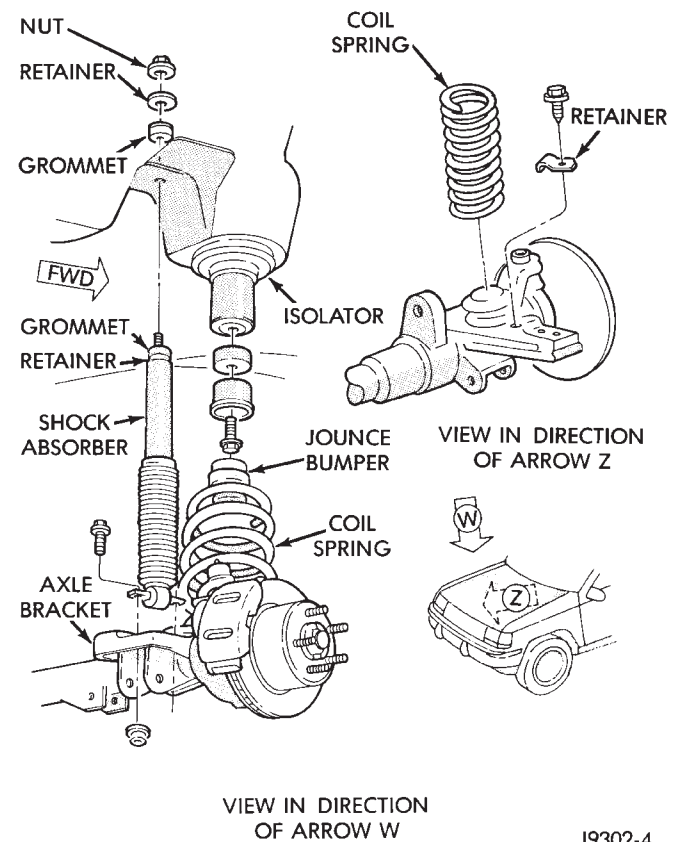
The shock absorber bushings do not require any type of lubrication. Do not attempt to stop bushing noise by lubricating them. Grease and mineral oil-base lubricants will deteriorate the bushing rubber.

REMOVAL AND INSTALLATION

SHOCK ABSORBER

REMOVAL

(1) Remove the nut, retainer and grommet from the upper stud in the engine compartment (Fig. 2).



J9302-4

Fig. 2 Coil Spring & Shock Absorber

(2) Remove the lower nuts and bolts from the axle bracket. Remove the shock absorber.

REMOVAL AND INSTALLATION (Continued)

INSTALLATION

(1) Position the lower retainer and grommet on the upper stud. Insert the shock absorber through the shock tower hole.

(2) Install the lower bolts and nuts. Tighten nuts to 28 N·m (250 in. lbs.).

(3) Install the upper grommet and retainer on the stud in the engine compartment. Install the nut and tighten to 23 N·m (17 ft. lbs.).

COIL SPRING

REMOVAL

(1) Raise and support the vehicle. Position a hydraulic jack under the axle to support it.

(2) Paint or scribe alignment marks on the cam adjusters and axle bracket for installation reference.

(3) Mark and disconnect the front propeller shaft from the axle.

(4) Remove the lower suspension arm nut, cam and cam bolt from the axle.

(5) Disconnect the stabilizer bar link and shock absorber from the axle.

(6) Disconnect the track bar from the frame rail bracket.

(7) Disconnect the drag link from the pitman arm.

(8) Lower the axle until the spring is free from the upper mount. Remove the coil spring retainer bolt and remove the spring.

(9) Remove the jounce bumper if necessary from the upper spring mount (Fig. 2).

INSTALLATION

(1) Install the jounce bumper on the upper spring mount. Tighten the bolts to 42 N·m (31 ft. lbs.).

(2) Position the coil spring on the axle pad. Install the spring retainer and bolt.

(3) Raise the axle into position until the spring seats in the upper mount.

(4) Connect the stabilizer bar links and shock absorbers to the axle bracket. Connect the track bar to the frame rail bracket.

(5) Install the lower suspension arm to the axle.

(6) Install the front propeller shaft to the axle.

(7) Install drag link to pit man arm.

(8) Remove the supports and lower the vehicle.

(9) Tighten all suspension components to proper torque.

STEERING KNUCKLE

For service procedures on the steering knuckle and ball studs refer to Group 3 Differentials And Driveline.

LOWER SUSPENSION ARM

REMOVAL

(1) Raise and support the vehicle.

(2) Paint or scribe alignment marks on the cam adjusters and suspension arm for installation reference (Fig. 3).

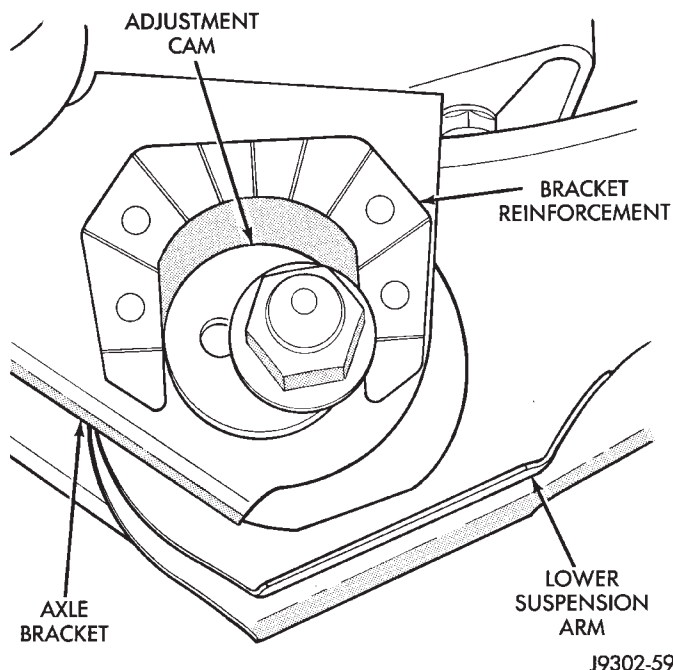


Fig. 3 Cam Adjuster

(3) Remove the lower suspension arm nut, cam and cam bolt from the axle (Fig. 4).

(4) Remove the nut and bolt from the frame rail bracket and remove the lower suspension arm (Fig. 4).

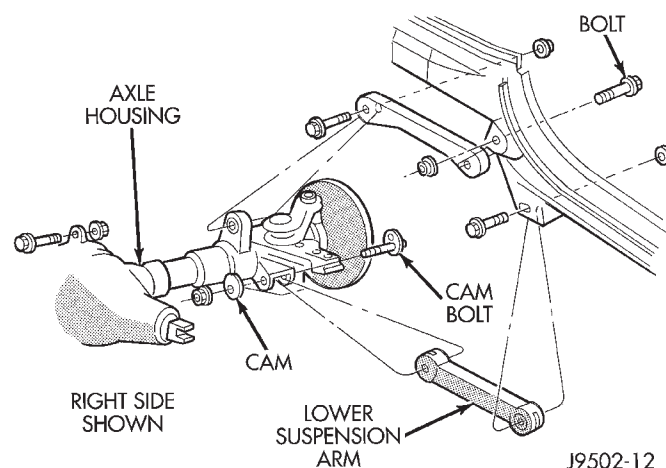


Fig. 4 Upper & Lower Suspension Arms

INSTALLATION

(1) Position the lower suspension arm at the axle bracket and frame rail bracket.

REMOVAL AND INSTALLATION (Continued)

- (2) Install the rear bolts and finger tighten the new nuts.
- (3) Install a new cam bolt, cam and new nut in the axle. Re-align the reference marks.
- (4) Install the bolts and finger tighten the new nuts.
- (5) Lower the vehicle.
- (6) Tighten the front and rear nuts to 115 N·m (85 ft. lbs.).
- (7) Check the alignment if new parts were installed.

UPPER SUSPENSION ARM**REMOVAL**

- (1) Raise and support the vehicle.
- (2) Remove the upper suspension arm nut and bolt at the axle bracket (Fig. 4).
- (3) Remove the nut and bolt at the frame rail and remove the upper suspension arm.

INSTALLATION

- (1) Position the upper suspension arm at the axle and frame rail.
- (2) Install the bolts and finger tighten the nuts.
- (3) Remove the supports and lower the vehicle.
- (4) Tighten the nut at the axle and frame bracket to 75 N·m (55 ft. lbs.).

AXLE BUSHING**REMOVAL**

- (1) Remove the upper suspension arm from axle
- (2) Position Receiver 7932-1 (J-35581-1) over the bushing in the axle and install Bushing Removal/Installer (Fig. 5).
- (3) Remove the bushing by tightening the Long Nut.

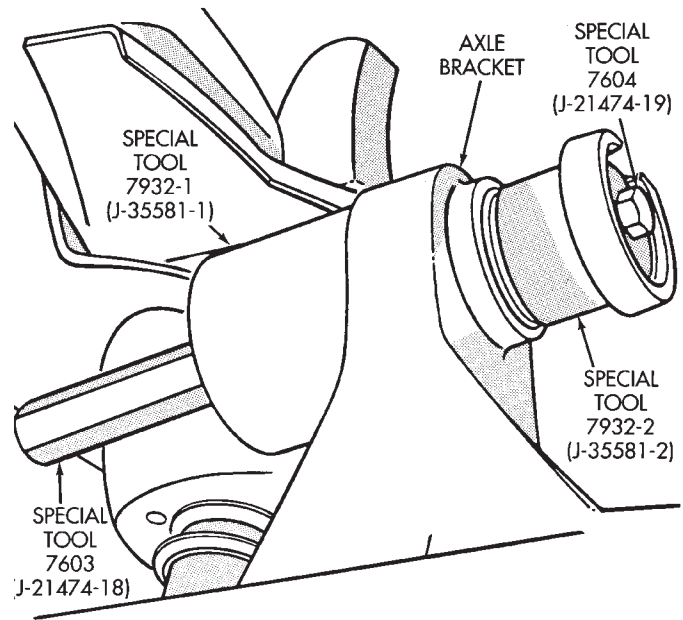
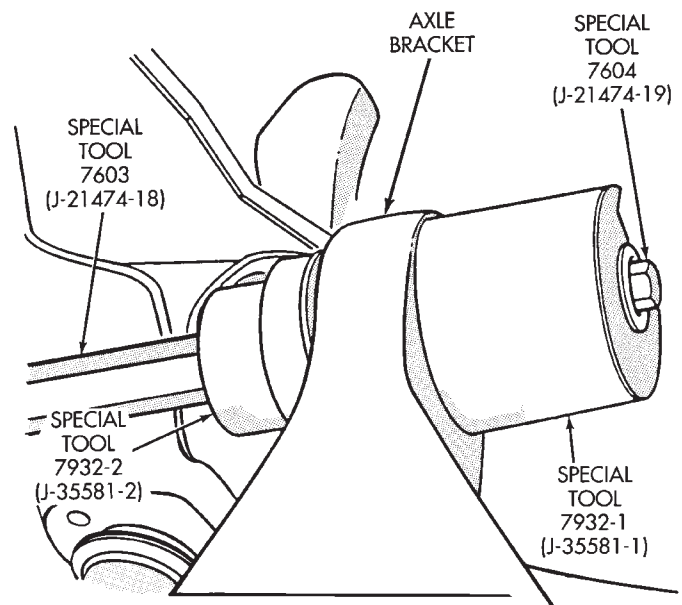
NOTE: For two-wheel drive axles and right side on Model 30 axle, do not remove Receiver 7932-1 (J-35581-1) at this time.

INSTALLATION

- (1) Position new bushing, Receiver and Installer on axle (Fig. 6).
- (2) Install the bushing by tightening the Long Nut.
- (3) Remove tools and install the upper suspension arm.

STABILIZER BAR**REMOVAL**

- (1) Raise and support the vehicle.
- (2) Remove the stabilizer bar link nuts from the axle brackets (Fig. 7).

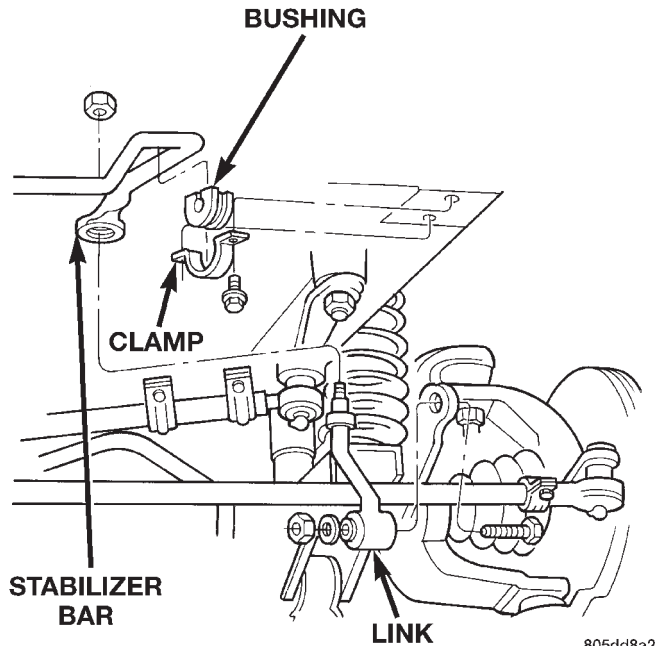
**Fig. 5 Bushing Removal****Fig. 6 Bushing Installation**

- (3) Remove the stabilizer bar link nuts from the stabilizer bar.
- (4) Remove the stabilizer bar clamps bolts from the frame rails and remove the stabilizer bar.

INSTALLATION

- (1) Position the stabilizer bar on the frame rail and install the clamps and bolts. Ensure the bar is centered with equal spacing on both sides. Tighten the bolts to 54 N·m (40 ft. lbs.).

REMOVAL AND INSTALLATION (Continued)

**Fig. 7 Stabilizer Bar**

(2) Install the links into the stabilizer bar and axle brackets. Tighten the nuts at the axle bracket finger tight.

(3) Tighten the stabilizer bar to link nuts to 61 N·m (45 ft. lbs.).

(4) Remove the supports and lower the vehicle.

(5) Tighten the nuts at the axle bracket end to 95 N·m (70 ft. lbs.).

TRACK BAR**REMOVAL**

(1) Raise and support the vehicle.

(2) Remove the cotter pin and nut from the ball stud end at the frame rail bracket (Fig. 8).

NOTE: A puller tool may be necessary to separate the ball stud from the frame rail bracket.

(3) Remove the bolt and flag nut from the axle shaft tube bracket (Fig. 8). Remove the track bar.

INSTALLATION

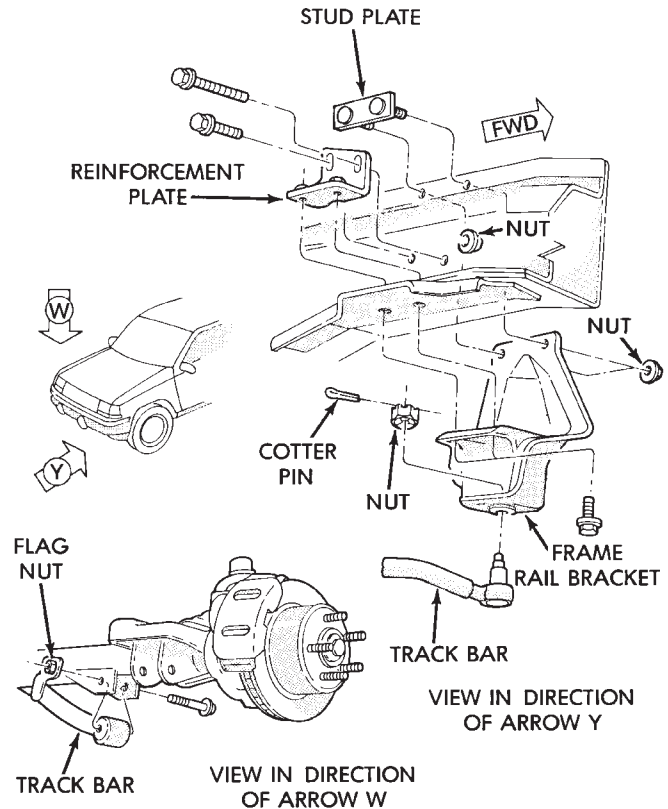
(1) Install the track bar at axle tube bracket. Loosely install the retaining bolt and flag nut.

(2) It may be necessary to pry the axle assembly over to install the track bar at the frame rail. Install track bar at the frame rail bracket. Install the retaining nut on the stud.

(3) Remove the supports and lower the vehicle.

(4) Tighten the bolt at the axle shaft tube bracket to 75 N·m (55 ft. lbs.).

(5) Tighten the ball stud nut to 81 N·m (60 ft. lbs.). Install a new cotter pin.

**Fig. 8 Track Bar**

J9302-1

(6) Check alignment if a new track bar was installed.

HUB BEARING

The Hub Bearing is serviced as an assembly.

REMOVAL

(1) Raise and support the vehicle.

(2) Remove the wheel and tire assembly.

(3) Remove the brake components from the axle, refer to Group 5 Brakes.

(4) Remove the cotter pin, nut retainer and axle hub nut (Fig. 9).

(5) Remove the hub mounting bolts and remove hub bearing from the steering knuckle and axle shaft.

INSTALLATION

(1) Install the hub bearing and brake dust shield to the knuckle.

(2) Install the hub to knuckle bolts and tighten to 102 N·m (75 ft. lbs.).

(3) Install the hub washer and nut. Tighten the hub nut to 237 N·m (175 ft. lbs.). Install the nut retainer and a new cotter pin.

(4) Install the brake components, refer to Group 5 Brakes.

(5) Install the wheel and tire assembly.

(6) Remove support and lower the vehicle.

REMOVAL AND INSTALLATION (Continued)

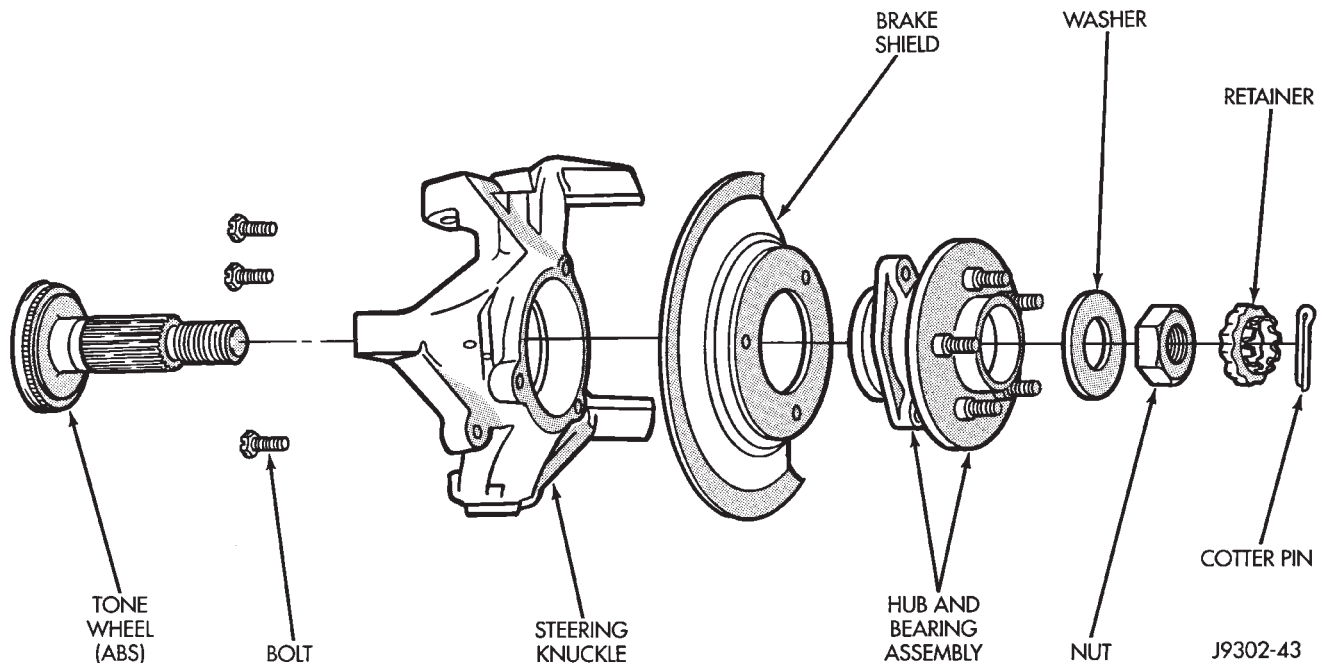


Fig. 9 Hub Bearing & Knuckle

WHEEL MOUNTING STUDS

REMOVAL

- (1) Raise and support vehicle.
- (2) Remove wheel and tire assembly.
- (3) Remove brake caliper and rotor, refer to Group 5 Brakes for procedure.
- (4) Remove stud from hub with Remover C-4150A (Fig. 10).

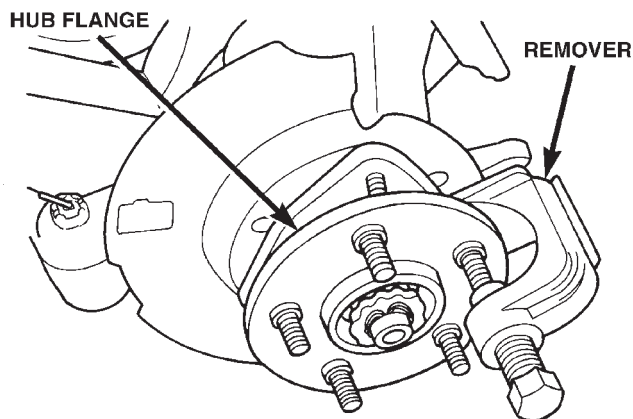


Fig. 10 Wheel Stud Removal

INSTALLATION

- (1) Install new stud into hub flange.
- (2) Install three washer onto stud, then install lug nut with the flat side of the nut against the washers.
- (3) Tighten lug nut until the stud is pulled into the hub flange. Verify that the stud is properly seated into the flange.

- (4) Remove lug nut and washers.
- (5) Install the brake rotor and caliper, refer to Group 5 Brakes for procedure.
- (6) Install wheel and tire assembly, use new lug nut on stud or studs that were replaced.
- (7) Remove support and lower vehicle.

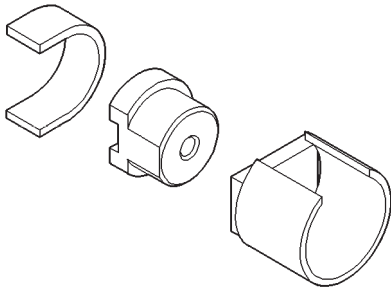
SPECIFICATIONS

TORQUE CHART

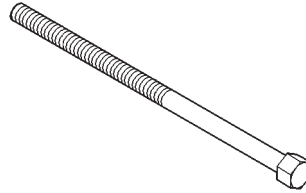
DESCRIPTION	TORQUE
Shock Absorber	
Upper Nut.....	.23 N·m (17 ft. lbs.)
Lower Nut.....	.28 N·m (250 in. lbs.)
Suspension Arm Upper	
Nuts	.75 N·m (55 ft. lbs.)
Suspension Arm Lower	
Nuts.....	.115 N·m (85 ft. lbs.)
Stabilizer Bar	
Clamp Bolt	.54 N·m (40 ft. lbs.)
Link Upper Nut.....	.61 N·m (45 ft. lbs.)
Link Lower Bolt	.95 N·m (70 ft. lbs.)
Track Bar	
Ball Stud Nut	.81 N·m (60 ft. lbs.)
Axle Bracket Bolt	.75 N·m (55 ft. lbs.)
Track Bar Bracket	
Bolts	.121 N·m (90 ft. lbs.)
Nut	.121 N·m (90 ft. lbs.)
Support Bolts	.95 N·m (70 ft. lbs.)

SPECIAL TOOLS

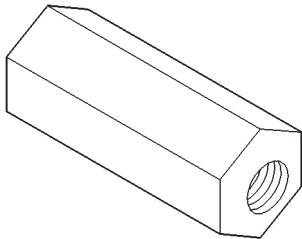
FRONT SUSPENSION



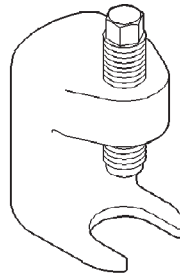
***Remover/Installer Suspension Bushing 7932
(J-35581)***



Bolt, Special 7604 (J-21474-19)



Nut, Long 7603 (J-21474-18)



Remover C-4150A

REAR SUSPENSION

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DESCRIPTION AND OPERATION

REAR SUSPENSION

The rear suspension is link/coil design comprised of (Fig. 1):

- Drive axle
- Dual-action shock absorbers
- Coil springs
- Upper and lower suspension arms
- Track bar
- Stabilizer bar
- Jounce bumpers

Upper And Lower Suspension: The suspension arms use bushings to isolate road noise. The suspension arms are bolted to the body and axle through the rubber bushings. The upper suspension arm has provision for the use of cam bolts at the axle to allow for pinion angle or thrust angle adjustment. The cams are available as a service kit and are not installed at the factory. The suspension arm travel is limited through the use of jounce bumpers in compression and shock absorbers in rebound.

Shock Absorbers: The shock absorbers dampen jounce and rebound of the vehicle over various road conditions. The top of the shock absorbers are bolted to the body. The bottom of the shocks are bolted to the axle shock absorber bracket.

Coil Springs: The coil springs mount up in the fender shield that is part of the unitized body bracket. There is a rubber isolator between the top of the spring and bracket to isolate road noise. The bottom of the spring seats on the axle pad and is retained with a clip.

Stabilizer Bar: The stabilizer bar is used to control vehicle body roll during turns. The spring steel bar helps to equalize the vehicle body in relationship to the suspension. The bar extends across the underside of the chassis and connects to the frame rails. Links are connected from the bar to the axle brackets. Stabilizer bar are isolated by rubber bushings.

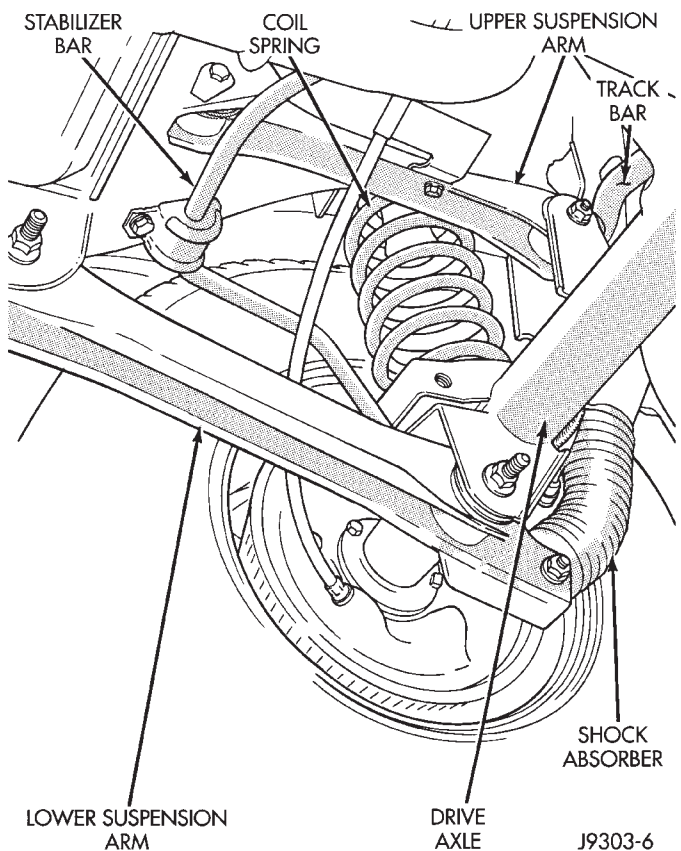


Fig. 1 Rear Suspension

Track Bar: The track bar is used to control rear axle lateral movement. The track bar is attached to a frame rail bracket and an axle bracket. It is isolated with bushings at both ends.

CAUTION: Suspension components that use rubber bushings should be tightened with the vehicle at normal ride height. This will prevent premature failure of the bushing and maintain ride comfort. Rubber bushings must never be lubricated.

DIAGNOSIS AND TESTING

SHOCK DIAGNOSIS

A noise from a shock absorber may be caused by movement between mounting bushings and metal brackets or attaching components. This noise can usually be stopped by tightening the attaching nuts. If the noise persists, inspect for damaged and worn bushings, and attaching components. Repair as necessary if any of these conditions exist.

The shock absorbers are not refillable or adjustable. If a malfunction occurs, the shock absorber must be replaced. To test a shock absorber, hold it in an upright position and force the piston in and out of the cylinder four or five times. The action throughout each stroke should be smooth and even.

The shock absorber bushings do not require any type of lubrication. Do not attempt to stop bushing noise by lubricating them. Grease and mineral oil-base lubricants will deteriorate the bushing rubber.

REMOVAL AND INSTALLATION

SHOCK ABSORBER

REMOVAL

- (1) Raise and support the vehicle. Position a hydraulic jack under the axle to support it.
- (2) Remove the upper nut and retainer from the frame rail stud (Fig. 2).
- (3) Remove the lower nut and bolt from the axle bracket. Remove the shock absorber.

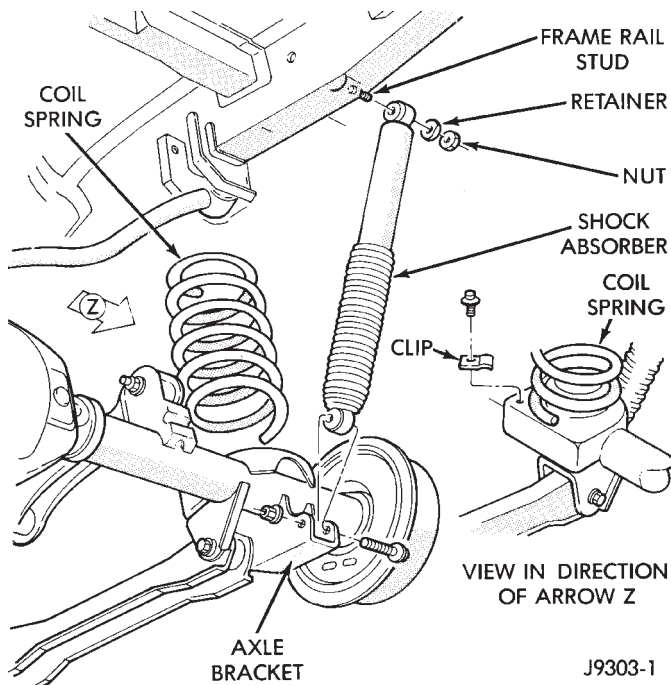


Fig. 2 Rear Coil Spring & Shock Absorber

INSTALLATION

- (1) Install the shock absorber on the upper frame rail stud. Install the shock absorber on the axle bracket.
- (2) Install the retainer and nut on the stud. Tighten the upper nut to 70 N·m (52 ft. lbs.).
- (3) Install lower bolt and nut finger tight.
- (4) Remove the supports and lower the vehicle.
- (5) Tighten the lower nut to 92 N·m (68 ft. lbs.).

COIL SPRING

REMOVAL

- (1) Raise and support the vehicle. Position a hydraulic jack under the axle to support it.
- (2) Disconnect the stabilizer bar link and shock absorber from the axle bracket.
- (3) Disconnect the track bar from the frame rail bracket.
- (4) Lower the axle until the spring is free from the upper mount seat. Remove the coil spring retainer bolt (Fig. 2) and remove the spring.

INSTALLATION

- Inspect isolator for damage or wear. Replace the isolator if necessary before installing spring.
- (1) Position the coil spring on the axle pad. Install the spring retainer and bolt. Tighten the bolt to 22 N·m (16 ft. lbs.).
 - (2) Raise the axle into position until the spring seats in the upper mount.
 - (3) Connect the stabilizer bar links and shock absorbers to the axle bracket. Connect the track bar to the frame rail bracket.
 - (4) Remove the supports and lower the vehicle.
 - (5) Tighten the track bar and shock absorber to specified torque.

LOWER SUSPENSION ARM

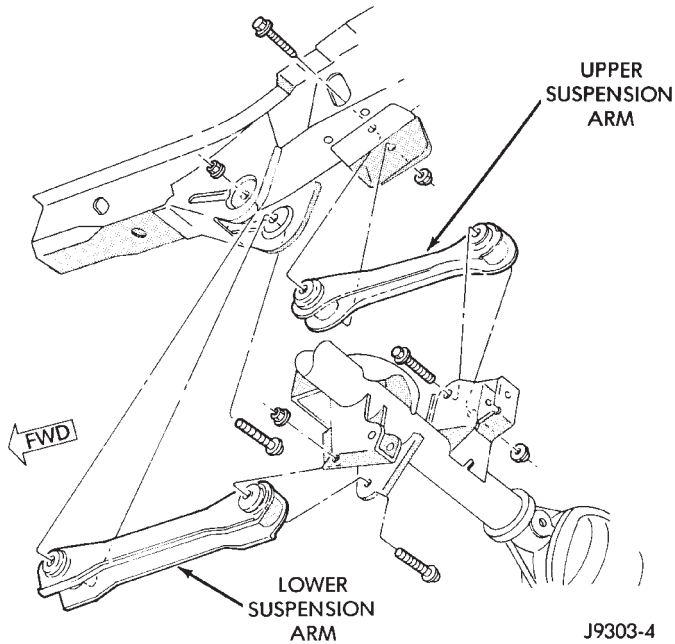
REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the lower suspension arm nut and bolt at the axle bracket (Fig. 3).
- (3) Remove the nut and bolt (Fig. 3) at the frame rail and remove the lower suspension arm.

INSTALLATION

- (1) Position the lower suspension arm at the axle bracket and frame rail bracket.
- (2) Install the bolts and finger tighten the nuts.
- (3) Remove the supports and lower the vehicle.
- (4) Tighten the lower suspension arm nuts to 177 N·m (130 ft. lbs.).

REMOVAL AND INSTALLATION (Continued)

**Fig. 3 Upper & Lower Suspension Arms****UPPER SUSPENSION ARM****REMOVAL**

- (1) Raise and support the vehicle.
- (2) Remove the upper suspension arm nut and bolt at the axle bracket (Fig. 3). Remove the ABS wire bracket from the arm.
- (3) Remove the nut and bolt at the frame rail and remove the upper suspension arm.

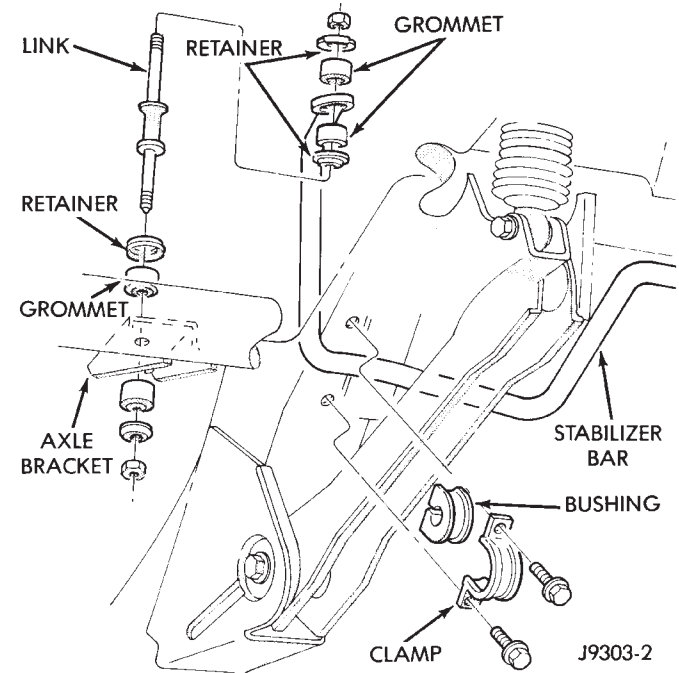
INSTALLATION

- (1) Position the upper suspension arm at the axle and frame rail.
- (2) Install the bolts and finger tighten the nuts. Install the ABS wire bracket onto the arm.
- (3) Remove the supports and lower the vehicle.
- (4) Tighten the upper suspension arm nuts to 75 N·m (55 ft. lbs.).

STABILIZER BAR**REMOVAL**

- (1) Raise and support the vehicle. Remove one wheel and tire.

- (2) Disconnect the stabilizer bar links from the axle brackets (Fig. 4).
- (3) Lower the exhaust by disconnecting the muffler and tail pipe hangers.
- (4) Disconnect the stabilizer bar from the links.
- (5) Disconnect the stabilizer bar clamps from the frame rails. Remove the stabilizer bar.

**Fig. 4 Rear Stabilizer Bar****INSTALLATION**

- (1) Position the stabilizer bar on the frame rail and install the clamps and bolts. Ensure the bar is centered with equal spacing on both sides. Tighten the bolts to 54 N·m (40 ft. lbs.).
- (2) Install the links and grommets onto the stabilizer bar and axle brackets. Install the nuts and tighten to 36 N·m (27 ft. lbs.).
- (3) Connect the muffler and tail pipe to their hangers.
- (4) Install the wheel and tire assembly.

REMOVAL AND INSTALLATION (Continued)

TRACK BAR

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the bolt and nut from the frame rail bracket (Fig. 5).
- (3) Remove the bolt from the axle tube bracket (Fig. 5). Remove the track bar.

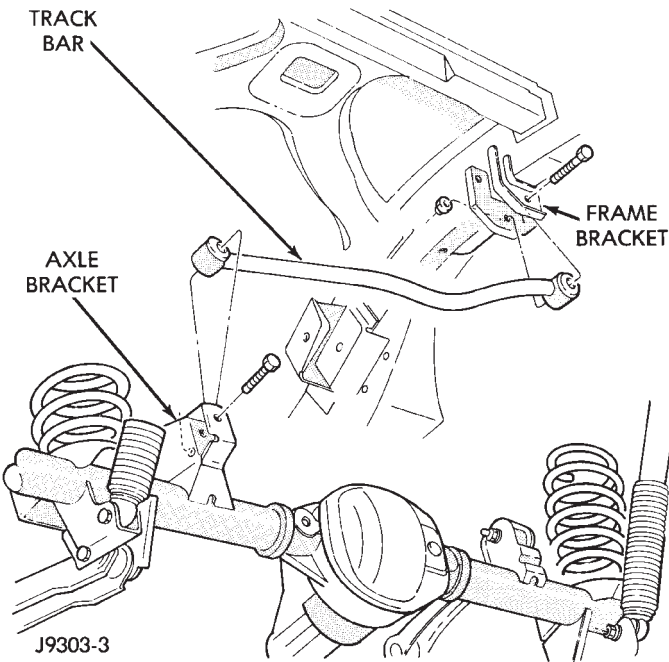


Fig. 5 Rear Track Bar

INSTALLATION

- (1) Install the track bar to the axle bracket and install a new bolt.
- (2) It may be necessary to pry the axle assembly over to install the track bar. Install the track bar to the frame rail bracket. Loosely install the bolt and flag nut.
- (3) Remove the supports and lower the vehicle.
- (4) Tighten the track bar bolts 100 N·m (74 ft. lbs.).

SPECIFICATIONS

TORQUE CHART

DESCRIPTION	TORQUE
Shock Absorber	
Upper Nut	.70 N·m (52 ft. lbs.)
Lower Nut	.92 N·m (68 ft. lbs.)
Suspension Arm Upper	
Nuts	.75 N·m (55 ft. lbs.)
Suspension Arm Lower	
Nuts	.177 N·m (130 ft. lbs.)
Stabilizer Bar	
Clamp Bolt	.54 N·m (40 ft. lbs.)
Link Nut	.36 N·m (27 ft. lbs.)
Track Bar	
Frame Bracket Nut	.100 N·m (74 ft. lbs.)
Axle Bracket Bolt	.100 N·m (74 ft. lbs.)