

SUSPENSION

TABLE OF CONTENTS

	page	page
SUSPENSION		
DIAGNOSIS AND TESTING - SUSPENSION		
AND STEERING SYSTEM	1	
WHEEL ALIGNMENT		3
FRONT		7
REAR		16

SUSPENSION

DIAGNOSIS AND TESTING - SUSPENSION AND STEERING SYSTEM

CONDITION	POSSIBLE CAUSES	CORRECTION
FRONT END NOISE	1. Loose or worn wheel bearings. 2. Loose or worn steering or suspension components.	1. Replace wheel bearings. 2. Tighten or replace components as necessary.
EXCESSIVE PLAY IN STEERING	1. Loose or worn wheel bearings. 2. Loose or worn steering or suspension components. 3. Loose or worn steering gear.	1. Replace wheel bearings. 2. Tighten or replace components as necessary. 3. Adjust or replace steering gear.
FRONT WHEELS SHIMMY	1. Loose or worn wheel bearings. 2. Loose or worn steering or suspension components. 3. Tires worn or out of balance. 4. Alignment.	1. Replace wheel bearings. 2. Tighten or replace components as necessary. 3. Replace or balance tires. 4. Align vehicle to specifications.
VEHICLE INSTABILITY	1. Loose or worn wheel bearings. 2. Loose or worn steering or suspension components. 3. Tire pressure. 4. Alignment.	1. Replace wheel bearings. 2. Tighten or replace components as necessary. 3. Adjust tire pressure. 4. Align vehicle to specifications.
EXCESSIVE STEERING EFFORT	1. Loose or worn steering gear. 2. Power steering fluid low. 3. Column coupler binding. 4. Tire pressure. 5. Alignment.	1. Adjust or replace steering gear. 2. Add fluid and repair leak. 3. Replace coupler. 4. Adjust tire pressure. 5. Align vehicle to specifications.
VEHICLE PULLS TO ONE SIDE DURING BRAKING	1. Uneven tire pressure. 2. Worn brake components. 3. Air in brake line.	1. Adjust tire pressure. 2. Repair brakes as necessary. 3. Repair as necessary.

SUSPENSION (Continued)

CONDITION	POSSIBLE CAUSES	CORRECTION
VEHICLE LEADS OR DRIFTS FROM STRAIGHT AHEAD DIRECTION ON UNCROWNED ROAD	1. Radial tire lead. 2. Brakes dragging. 3. Weak or broken spring. 4. Uneven tire pressure. 5. Wheel Alignment. 6. Loose or worn steering or suspension components. 7. Cross caster out of spec.	1. Cross front tires. 2. Repair brake as necessary. 3. Replace spring. 4. Adjust tire pressure. 5. Align vehicle. 6. Repair as necessary. 7. Align vehicle.
KNOCKING, RATTLING OR SQUEAKING	1. Worn shock bushings. 2. Loose, worn or bent steering/suspension components. 3. Shock valve.	1. Replace shock. 2. Inspect, tighten or replace components as necessary. 3. Replace shock.
IMPROPER TRACKING	1. Loose, worn or bent track bar. 2. Loose, worn or bent steering/suspension components.	1. Inspect, tighten or replace component as necessary. 2. Inspect, tighten or replace components as necessary.

WHEEL ALIGNMENT

TABLE OF CONTENTS

	page		page
WHEEL ALIGNMENT		STANDARD PROCEDURE - TOE	
DESCRIPTION	3	ADJUSTMENT	5
OPERATION	3	STANDARD PROCEDURE - CAMBER,	
STANDARD PROCEDURE		CASTER AND TOE ADJUSTMENT	5
STANDARD PROCEDURE - HEIGHT		SPECIFICATIONS	
MEASUREMENT	4	ALIGNMENT	6
STANDARD PROCEDURE - CAMBER AND			
CASTER ADJUSTMENT	5		

WHEEL ALIGNMENT

DESCRIPTION

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 minimize tire wear. The most important measurements of an alignment are caster, camber and toe (Fig. 1).

CAUTION: Never attempt to modify suspension or steering components by heating or bending.

NOTE: Periodic lubrication of the front suspension/steering system components may be required. Rubber bushings must never be lubricated. Refer to Lubrication And Maintenance for the recommended maintenance schedule.

OPERATION

- **CASTER** is the forward or rearward tilt of the steering knuckle from vertical. Tilting the top of the knuckle forward provides negative caster. Tilting the top of the knuckle rearward provides positive caster. Positive caster promotes directional stability. This angle enables the front wheels to return to a straight ahead position after turns (Fig. 1)
- **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 (Fig. 1)

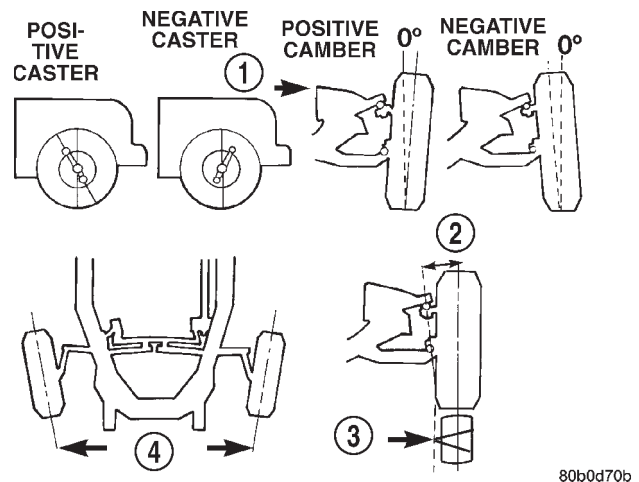


Fig. 1 Wheel Alignment Measurements

- 1 - FRONT OF VEHICLE
- 2 - STEERING AXIS INCLINATION
- 3 - PIVOT POINT
- 4 - TOE-IN

• **TOE** is the difference between the leading inside edges and trailing inside edges of the front tires. Wheel toe position out of specification cause's unstable steering, uneven tire wear and steering wheel off-center. The wheel toe position is the **final** front wheel alignment adjustment (Fig. 1)

• **THRUST ANGLE** is the angle of the rear axle relative to the centerline of the vehicle. Incorrect thrust angle can cause off-center steering and excessive tire wear. This angle is not adjustable, damaged component(s) must be replaced to correct the thrust angle (Fig. 1)

WHEEL ALIGNMENT (Continued)

STANDARD PROCEDURE

STANDARD PROCEDURE - HEIGHT MEASUREMENT

RIDE HEIGHT

NOTE: The suspension is non-adjustable.

The vehicle suspension height should be measured before performing wheel alignment procedure. Also when front suspension components have been replaced. This measure must be performed with the vehicle supporting it's own weight and taken on both sides of the vehicle.

Front and rear ride heights are not adjustable. The spring selections at assembly determine ride height for acceptable appearance of the vehicle. Ride height dimensions assume full fluids (including fuel) and zero passengers. Refer to the table below for front ride height dimensions.

Vehicle ride height audits should be performed utilizing the following procedure:

- (1) Drive the vehicle straight and forward on a non-tacky surface for a minimum of 20 feet to neutralize track width.
- (2) Bounce the front of the vehicle five times.
- (3) Measure and record the dimensions

FRONT RIDE HEIGHT Front ride height is defined by the relative vertical distance between the spindle center line and the rear pivot point of the front lower control arm to cradle attachment. The spindle center line is to be measured at the outer wheel face (point A). The rear pivot point is to be measured at the center of the cam bolt (point B) at its rearward most end (nut end). (Fig. 2)

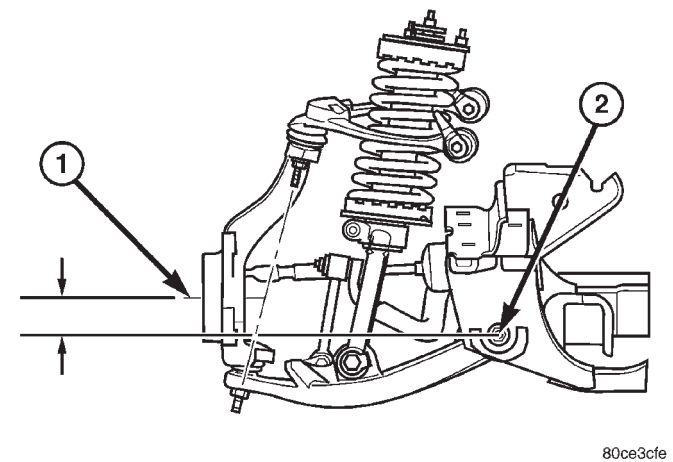


Fig. 2 FRONT RIDE HEIGHT MESUREMENT

- 1 - POINT - A
- 2 - POINT - B

REAR RIDE HEIGHT Rear ride height is defined by the relative vertical distance between the top of the lower spring seat strike surface and the bottom of the jounce cup (true metal to metal jounce travel). This is to be measured vertically inside the coil from the point intersecting the inboard edge and the for/ aft center of the jounce cup (point C) down to the strike surface (point D). (Fig. 3)

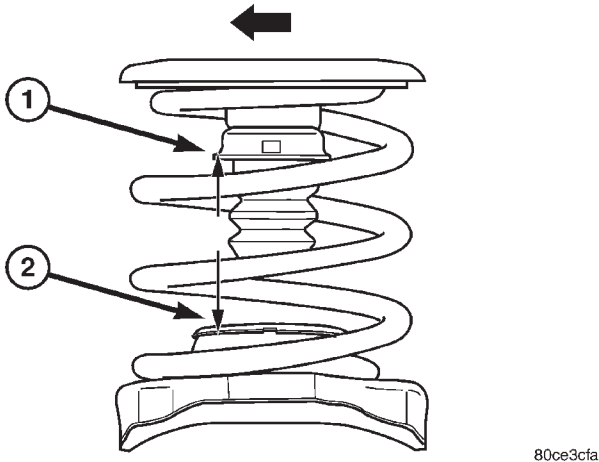


Fig. 3 REAR RIDE HEIGHT MEASUREMENT

- 1 - POINT - C
- 2 - POINT - D

Measurement	Target	Minimum	Maximum
Front Ride Height Distance AB	48.8 mm Z=996.81 - 948.03	38.8mm	58.8mm
Front Cross Ride Height Left - Right	0.0 mm	-10.0 mm	10.0 mm
Rear Ride Height Distance CD	116.1 mm	106.1 mm	126.1 mm
Rear Cross Ride Height Left - Right	0.0 mm	-10.0 mm	10.0 mm

WHEEL ALIGNMENT (Continued)

STANDARD PROCEDURE - CAMBER AND CASTER ADJUSTMENT

Camber and caster angle adjustments involve changing the position of the lower suspension arm cam bolts. (Fig. 4)

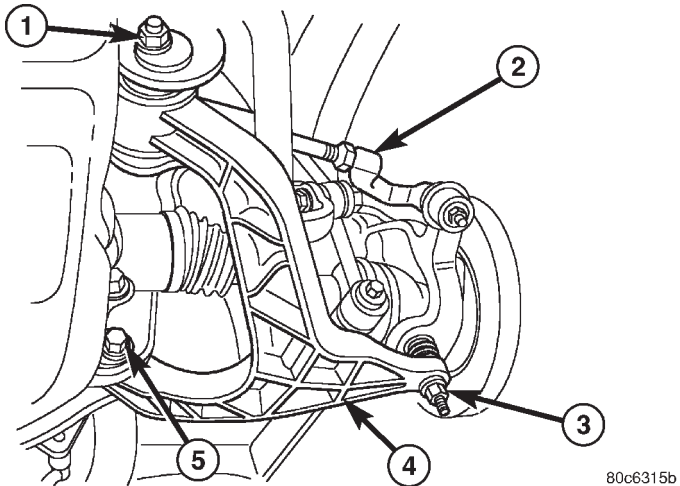


Fig. 4 LOWER CONTROL ARM

- 1 - FRONT CAM BOLT
- 2 - OUTER TIE ROD END
- 3 - LOWER BALL JOINT NUT
- 4 - LOWER CONTROL ARM
- 5 - REAR CAM BOLT

STANDARD PROCEDURE - TOE ADJUSTMENT

4X4 SUSPENSION HEIGHT MEASUREMENT MUST BE PERFORMED BEFORE AN ALIGNMENT.

The wheel toe position adjustment is the final adjustment.

(1) Start the engine and turn wheels both ways before straightening the wheels. Secure the steering wheel with the front wheels in the straight-ahead position.

(2) Loosen the tie rod jam nuts.

NOTE: Each front wheel should be adjusted for one-half of the total toe position specification. This will ensure the steering wheel will be centered when the wheels are positioned straight-ahead.

(3) Adjust the wheel toe position by turning the tie rod as necessary (Fig. 5).

(4) Tighten the tie rod jam nut to 75 N·m (55 ft. lbs.).

(5) Verify the specifications

(6) Turn off engine.

STANDARD PROCEDURE - CAMBER, CASTER AND TOE ADJUSTMENT

Camber and caster angle adjustments involve changing the position of the lower suspension arm cam bolts. (Fig. 4)

CASTER

Moving the rear position of the cam bolt in or out, will change the caster angle significantly and camber angle only slightly. To maintain the camber angle while adjusting caster, move the rear of the cam bolt in or out. Then move the front of the cam bolt slightly in the opposite direction. (Fig. 4)

To increase positive caster angle, move the rear position of the cam bolt outward (from the engine). Move the front of cam bolt inward (toward the engine) slightly until the original camber angle is obtained. (Fig. 4)

CAMBER

Move both of the cam bolts together in or out. This will change the camber angle significantly and caster angle slightly. (Fig. 4)

After adjustment is made tighten the cam bolt nuts to proper torque specification.

TOE ADJUSTMENT

The wheel toe position adjustment is the final adjustment.

(1) Start the engine and turn wheels both ways before straightening the wheels. Secure the steering wheel with the front wheels in the straight-ahead position.

(2) Loosen the tie rod jam nuts.

NOTE: Each front wheel should be adjusted for one-half of the total toe position specification. This will ensure the steering wheel will be centered when the wheels are positioned straight-ahead.

(3) Adjust the wheel toe position by turning the tie rod as necessary (Fig. 5).

(4) Tighten the tie rod jam nut to 75 N·m (55 ft. lbs.).

(5) Verify the specifications

(6) Turn off engine.

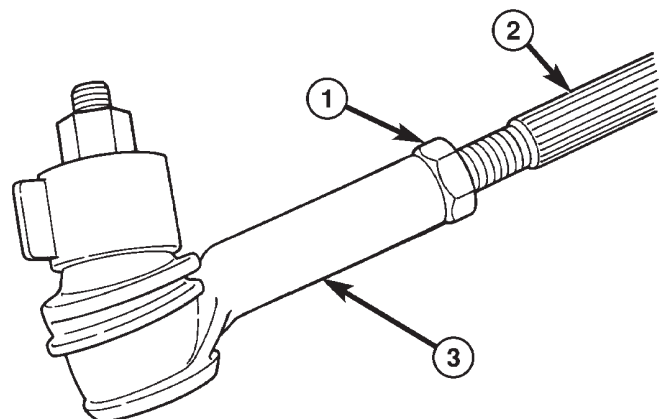


Fig. 5 TIE ROD END

- 1 - JAM NUT
- 2 - TIE ROD - INNER
- 3 - TIE ROD END - OUTER

80cd1759

WHEEL ALIGNMENT (Continued)

SPECIFICATIONS

ALIGNMENT

NOTE: Specifications are in degrees.

FRONT

SPECIFICATIONS

DESCRIPTION	SPECIFICATION		
PREFERRED	CASTER 3.5° ± .6°	CAMBER 0° ± .375°	TOTAL TOE-IN .20° ± .125°
RANGE	2.9° to + 4.1°	−.375° to +.375°	.07° to + .33°
MAX RT/LT DIFFERENCE	0.5°	0.7°	.13°

REAR

SPECIFICATIONS

DESCRIPTION	SPECIFICATION		
PREFERRED	CAMBER −.25°± .375°	THRUST ANGLE 0° to ± 0.25°	TOTAL TOE-IN .25° to ± .41°
RANGE	−.625° to .125°	−.25° to +.25°	−.16° to .66°

FRONT

TABLE OF CONTENTS

	page		page
FRONT		REMOVAL - RIGHT SIDE	11
DESCRIPTION	7	INSTALLATION	
WARNING	7	INSTALLATION - LEFT SIDE	12
SPECIFICATIONS		INSTALLATION - RIGHT SIDE	12
TORQUE CHART	8	SPRING	
SPECIAL TOOLS		REMOVAL	13
FRONT SUSPENSION	8	INSTALLATION	13
BUSHINGS		CLEVIS BRACKET	
REMOVAL - STABILIZER BAR BUSHINGS	9	REMOVAL	13
INSTALLATION - STABILIZER BAR BUSHINGS	9	INSTALLATION	13
HUB / BEARING		STABILIZER BAR	
REMOVAL	9	REMOVAL	14
INSTALLATION	9	INSTALLATION	14
KNUCKLE		STABILIZER LINK	
REMOVAL	9	REMOVAL	14
INSTALLATION	9	INSTALLATION	14
LOWER BALL JOINT		UPPER CONTROL ARM	
DIAGNOSIS AND TESTING - LOWER BALL JOINT	10	REMOVAL	
LOWER CONTROL ARM		REMOVAL - RIGHT SIDE	14
REMOVAL	10	REMOVAL - LEFT SIDE	15
INSTALLATION	10	INSTALLATION	
SHOCK		INSTALLATION - RIGHT SIDE	15
REMOVAL		INSTALLATION - LEFT SIDE	15
REMOVAL - LEFT SIDE	11		

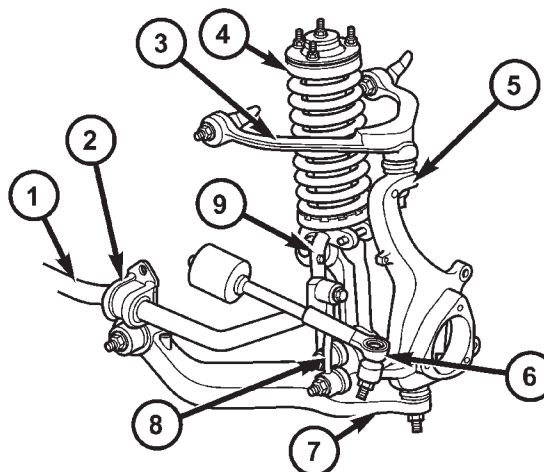
FRONT

DESCRIPTION

The front suspension is designed to allow each wheel to adapt to different road surfaces independently. The wheels are mounted to hub bearings on the steering knuckle spindles. The double-row hub bearings are sealed and lubricated for life. The steering knuckles turn (pivot) on ball joints riveted to the outboard portion of the control arms. The ball joints are lubricated for life. (Fig. 1)

WARNING

WARNING:: Suspension components with rubber bushings must be tightened with the vehicle at normal ride 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 will be affected and cause premature bushing wear.



80c6753a

Fig. 1 FRONT SUSPENSION

- 1 - SWAY BAR
- 2 - SWAY BAR BUSHING/BRACKET
- 3 - UPPER CONTROL ARM
- 4 - SPRING / SHOCK ASSEMBLY
- 5 - STEERING KNUCKLE
- 6 - OUTER TIE ROD END
- 7 - LOWER CONTROL ARM
- 8 - SWAY BAR LINK
- 9 - CLEVIS BRACKET

FRONT (Continued)

SPECIFICATIONS

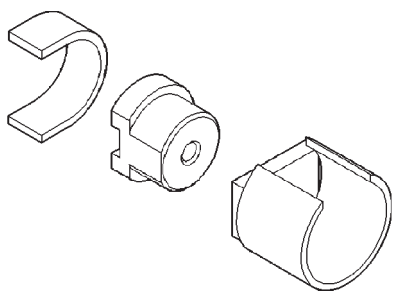
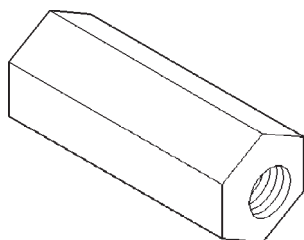
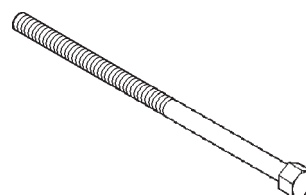
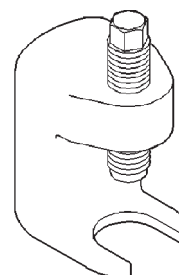
TORQUE CHART

TORQUE SPECIFICATIONS

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Front Shock Absorber Clevis Bracket Upper Nut	136	100	—
Front Shock Absorber Clevis Bracket Lower Nut	150	110	—
Front Shock Absorber Top (4) Mounting Nuts	108	80	—
Front Shock to Spring and Insulator Nut	41	30	—
Upper Suspension Arm Front Nut	122	90	—
Upper Suspension Arm Rear Nut	122	90	—
Lower Suspension Arm Front Nut	170	125	—
Lower Suspension Arm Rear Nut	170	125	—
Stabilizer Bar Clamp Nut	149	110	—
Stabilizer Bar Link Upper Nut	136	100	—
Stabilizer Bar Link Lower Nut	115	85	—
Hub/Bearing Bolt	130	96	—
Hub/Bearing Halfshaft Nut	135	100	—
Upper Ball Joint Nut	81	60	—
Lower Ball Joint Nut	81	60	—
Wheel Speed Sensor	13.5	10	—

SPECIAL TOOLS

FRONT SUSPENSION

**Remover/Installer Suspension Bushing 7932****Nut, Long 7603****Bolt, Special 7604****Remover C-4150A**

BUSHINGS

REMOVAL - STABILIZER BAR BUSHINGS

- (1) Raise vehicle on hoist.
- (2) Remove the stabilizer bushing clamps.
- (3) Remove the stabilizer bushings from the stabilizer bar.

INSTALLATION - STABILIZER BAR BUSHINGS

- (1) Install the stabilizer bushings to the stabilizer bar.
- (2) Install the stabilizer bushing clamps. Tighten the nuts to 149 N·m (110 ft.lbs.).
- (3) Lower the vehicle.

HUB / BEARING

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the caliper adapter (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/DISC BRAKE CALIPERS - REMOVAL).

CAUTION: Never allow the disc brake caliper to hang from the brake hose. Damage to the brake hose will result. Provide a suitable support to hang the caliper securely.

- (4) Remove the disc brake rotor (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - REMOVAL).
- (5) Remove the wheel speed sensor (Refer to 5 - BRAKES/ELECTRICAL/FRONT WHEEL SPEED SENSOR - REMOVAL).
- (6) Remove the bracket securing the wheel speed sensor wire.
- (7) Remove the axle shaft nut. (if equipped with four wheel drive)
- (8) Remove the three mounting bolts for the hub/bearing assembly.
- (9) Remove the hub/bearing.

INSTALLATION

- (1) Install the hub/bearing assembly to the vehicle.
- (2) Install the three mounting bolts for the hub/bearing. Tighten the bolt to 130 N·m (96 ft.lbs.).
- (3) Install the axle shaft nut. Tighten the nut to 135 N·m (100 ft.lbs.). (if equipped with four wheel drive)
- (4) Install the bracket to the wheel speed sensor wire.
- (5) Install the wheel speed sensor to the hub. Tighten the bolt to 13.5 N·m (10 ft.lbs.) (Refer to 5 -

BRAKES/ELECTRICAL/FRONT WHEEL SPEED SENSOR - INSTALLATION).

- (6) Install the disc brake rotor (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - INSTALLATION).

- (7) Install the disc brake caliper adapter. Tighten the nut to 135 N·m (100 ft.lbs.) (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - INSTALLATION).

- (8) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

KNUCKLE

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the caliper adapter. (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/DISC BRAKE CALIPER ADAPTER - REMOVAL).

CAUTION: Never allow the disc brake caliper to hang from the brake hose. Damage to the brake hose will result. Provide a suitable support to hang the caliper securely.

- (4) Remove the disc brake rotor. (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - REMOVAL).
- (5) Remove the wheel speed sensor. (Refer to 5 - BRAKES/ELECTRICAL/FRONT WHEEL SPEED SENSOR - REMOVAL).
- (6) Remove the axle shaft nut. (if equipped with four wheel drive)
- (7) Remove the hub/bearing. (Refer to 2 - SUSPENSION/FRONT/HUB / BEARING - REMOVAL).
- (8) Remove the outer tie rod end. (Refer to 19 - STEERING/LINKAGE/TIE ROD END - REMOVAL).
- (9) Remove the lower ball joint nut.
- (10) Separate the lower ball joint from the suspension arm using tool C-4150A.
- (11) Remove the upper ball joint nut.
- (12) Separate the upper ball joint from the knuckle using tool C-4150A.
- (13) Remove the knuckle from the vehicle.

INSTALLATION

- (1) Install the knuckle to the vehicle.
- (2) Install the upper ball joint nut. Tighten the nut to 81 N·m (60 ft.lbs.).
- (3) Install the lower ball joint nut. Tighten the nut to 81 N·m (60 ft.lbs.).
- (4) Install the outer tie rod end. (Refer to 19 - STEERING/LINKAGE/TIE ROD END - INSTALLATION).

KNUCKLE (Continued)

(5) Install the hub/bearing. (Refer to 2 - SUSPENSION/FRONT/HUB / BEARING - INSTALLATION).

(6) Install the axle shaft nut. Tighten the nut to 135 N·m (96 ft.lbs.).(if equipped with four wheel drive).

(7) Install the wheel speed sensor. (Refer to 5 - BRAKES/ELECTRICAL/FRONT WHEEL SPEED SENSOR - INSTALLATION).

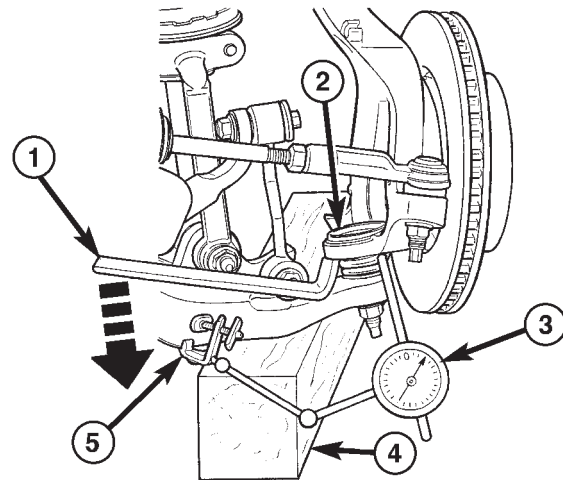
(8) Install the disc brake rotor. (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/ROTORS - INSTALLATION).

(9) Install the caliper adapter. (Refer to 5 - BRAKES/HYDRAULIC/MECHANICAL/DISC BRAKE CALIPER ADAPTER - INSTALLATION).

(10) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

(11) Perform the set toe procedure (Refer to 2 - SUSPENSION/WHEEL ALIGNMENT - STANDARD PROCEDURE).

(6) Record the ball joint movement on each side of the vehicle. The end play is acceptable with no more than 1.5mm of end play back to back.



80ca4e45

Fig. 2 SUSPENSION IN THE CURB POSITION

- 1 - PRY BAR
- 2 - BALL JOINT
- 3 - DIAL INDICATOR
- 4 - WOODEN BLOCK OR SUPPORT
- 5 - CLAMP

LOWER BALL JOINT

DIAGNOSIS AND TESTING - LOWER BALL JOINT

- (1) Raise the vehicle on a drive-on hoist.

NOTE: If a drive-on hoist is not available, use wooden blocks with jack stands to support the lower control arm in the ball joint area. Place the jack stands appropriately and lower the hoist placing weight on the lower control arm. The lower control arms should now be supporting the vehicle weight.

(2) With the use of jack stands, lift the front end off the hoist and position wooden blocks underneath both lower control arms supporting the vehicles weight.

- (3) Remove the tire and wheel assembly.

(4) Attach a dial indicator to the base of the lower control arm and align the dial indicator's contact point with the direction of the stud axis, touch the machined flat on the knuckle and zero the dial indicator. (Fig. 2)

NOTE: Use care when applying the load to the knuckle, so the parts are not damaged using care not to tear the boot.

(5) From the front of the vehicle, insert a pry bar to get it rested on the lower control arm and use lever principle to push the knuckle up until the arm of the dial indicator no longer moves.

LOWER CONTROL ARM

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the lower clevis bracket bolt at the lower control arm.
- (4) Remove the stabilizer link bolt at the lower control arm.
- (5) Remove the lower ball joint nut.
- (6) Separate the lower ball joint from the lower control arm using tool C-4150A.

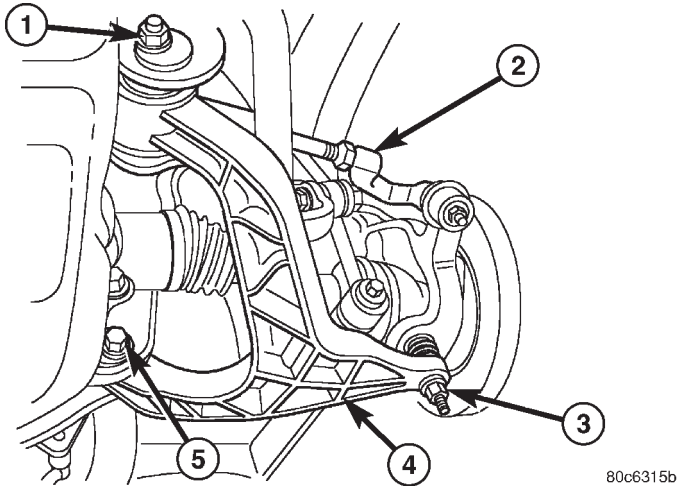
NOTE: Marking the lower control arm pivot bolts front and rear will aid in the assembly procedure.

- (7) Mark the lower control arm pivot bolts front and rear.
- (8) Remove the front cam/pivot bolt. (Fig. 3)
- (9) Remove the rear cam/pivot bolt. (Fig. 3)
- (10) Remove the lower control arm from the vehicle.

INSTALLATION

- (1) Install the lower control arm to the vehicle.
- (2) Install the rear cam/pivot bolt.
- (3) Install the front cam/pivot bolt.
- (4) Install the lower ball joint nut. Tighten the nut to 81 N·m (60 ft.lbs.)

LOWER CONTROL ARM (Continued)

**Fig. 3 LOWER CONTROL ARM**

- 1 - FRONT CAM BOLT
 2 - OUTER TIE ROD END
 3 - LOWER BALL JOINT NUT
 4 - LOWER CONTROL ARM
 5 - REAR CAM BOLT

(5) Align the marks front and rear at the cam/pivot bolts and tighten the bolts. Tighten the bolts to 170 N·m (125 ft.lbs.)

(6) Install the stabilizer link bolt at the lower control arm. Tighten the bolt to 136 N·m (100 ft.lbs.)

(7) Install the lower clevis bracket bolt at the lower control arm. Tighten the bolt to 150 N·m (110 ft.lbs.)

(8) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

(9) Perform a full wheel alignment (Refer to 2 - SUSPENSION/WHEEL ALIGNMENT - STANDARD PROCEDURE).

SHOCK

REMOVAL

REMOVAL - LEFT SIDE

- (1) Disconnect the battery.
- (2) Remove the battery (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/BATTERY - REMOVAL).
- (3) Unclip the power center and move it to the side out of the way.
- (4) Remove the battery tray (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/TRAY - REMOVAL).
- (5) Disconnect the battery temperature sensor from the battery tray.
- (6) Remove the four upper shock mounting nuts.
- (7) Raise and support the vehicle.

(8) Remove the left tire and wheel assembly.

(9) Remove the lower bolt at the lower control securing the clevis bracket.

(10) Remove the stabilizer link (Refer to 2 - SUSPENSION/FRONT/STABILIZER LINK - REMOVAL).

(11) Remove the lower ball joint nut.

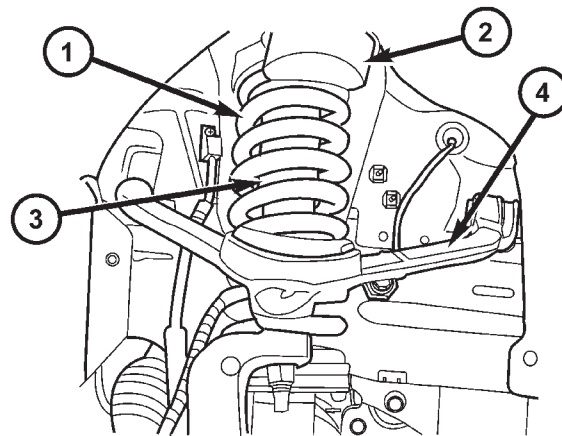
(12) Separate the lower ball joint from the lower control arm using tool C-4150A.

(13) Rotate the lower control arm downward to allow access.

(14) Remove the clevis bracket at the shock.

(15) Remove the shock assembly from the vehicle. (Fig. 4)

(16) Remove the spring from the shock (if needed).

**Fig. 4 SHOCK ASSEMBLY**

- 1 - SPRING
 2 - JOUNCE BUMPER
 3 - SHOCK
 4 - UPPER CONTROL ARM

REMOVAL - RIGHT SIDE

(1) Remove the air box (Refer to 9 - ENGINE/AIR INTAKE SYSTEM/AIR CLEANER ELEMENT - REMOVAL).

(2) Remove the two cruise control servo mounting nuts.

(3) Remove the upper shock mounting nuts.

(4) Raise and support the vehicle.

(5) Remove the right side tire assembly.

(6) Remove the lower bolt at the lower control securing the clevis bracket.

(7) Remove the stabilizer link (Refer to 2 - SUSPENSION/FRONT/STABILIZER LINK - REMOVAL).

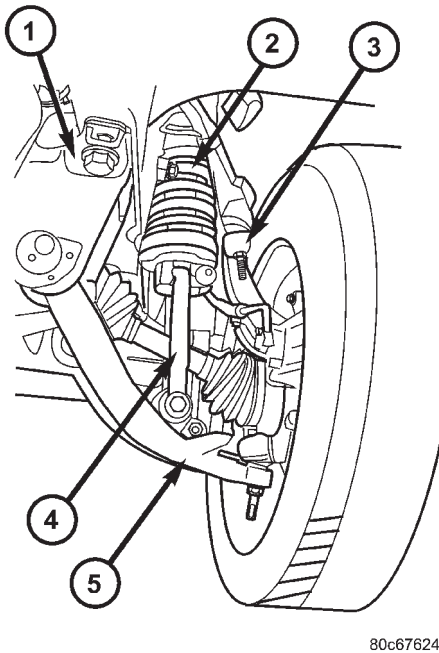
(8) Remove the lower ball joint nut.

(9) Separate the lower ball joint from the lower control arm using tool C-4150A.

(10) Rotate the lower control arm downward to allow access.

SHOCK (Continued)

- (11) Remove the clevis bracket at the shock. (Fig. 5)
- (12) Remove the shock assembly from the vehicle. (Fig. 5)
- (13) Remove the spring from the shock (if needed). (Refer to 2 - SUSPENSION/FRONT/SPRING - REMOVAL).

**Fig. 5 SHOCK & CLEVIS ASSEMBLY**

- 1 - FRONT CRADLE
- 2 - SPRING & SHOCK ASSEMBLY
- 3 - STEERING KNUCKLE
- 4 - CLEVIS BRACKET
- 5 - LOWER CONTROL ARM

INSTALLATION

INSTALLATION - LEFT SIDE

- (1) Install the spring to the shock (if removed).
- (2) Install the shock assembly to the vehicle.
- (3) Install the four upper shock mounting nuts. Tighten the nuts to 108 N·m (80 ft.lbs.).
- (4) Install the clevis bracket at the shock. (Refer to 2 - SUSPENSION/FRONT/CLEVIS BRACKET - INSTALLATION). Tighten the bolt to 88 N·m (65 ft.lbs.).
- (5) Raise the lower control into place and reconnect the lower ball joint nut. Tighten the nut to 81 N·m (60 ft.lbs.).
- (6) Install the clevis bracket at the lower control arm. (Refer to 2 - SUSPENSION/FRONT/CLEVIS BRACKET - INSTALLATION). Tighten the bolt to 150 N·m (110 ft.lbs.).

(7) Install the lower stabilizer link at the lower control arm. Tighten the bolt to 136 N·m (100 ft.lbs.) (Refer to 2 - SUSPENSION/FRONT/STABILIZER LINK - INSTALLATION).

(8) Install the left tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

(9) Lower the vehicle.

(10) Reconnect the battery temperature sensor.

(11) Install the battery tray (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/TRAY - INSTALLATION).

(12) Install the battery (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/BATTERY - INSTALLATION).

(13) Reconnect the battery cables.

INSTALLATION - RIGHT SIDE

(1) Install the spring to the shock (if removed). (Refer to 2 - SUSPENSION/FRONT/SPRING - INSTALLATION).

(2) Install the shock assembly to the vehicle.

(3) Install the four upper shock mounting nuts. Tighten the nuts to 108 N·m (80 ft.lbs.).

(4) Install the clevis bracket at the shock. (Refer to 2 - SUSPENSION/FRONT/CLEVIS BRACKET - INSTALLATION). Tighten the bolt to 88 N·m (65 ft.lbs.).

(5) Raise the lower control into place and reconnect the lower ball joint nut. Tighten the nut to 81 N·m (60 ft.lbs.).

(6) Install the clevis bracket at the lower control arm. (Refer to 2 - SUSPENSION/FRONT/CLEVIS BRACKET - INSTALLATION). Tighten the bolt to 150 N·m (110 ft.lbs.).

(7) Install the lower stabilizer link at the lower control arm. Tighten the bolt to 136 N·m (100 ft.lbs.) (Refer to 2 - SUSPENSION/FRONT/STABILIZER LINK - INSTALLATION).

(8) Install the right tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

(9) Lower the vehicle.

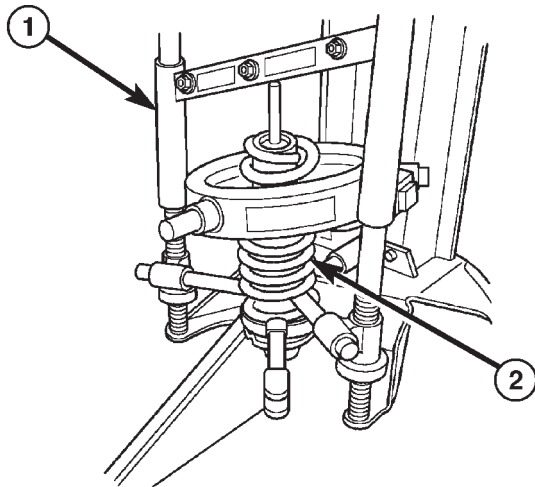
(10) Install the cruise control servo mounting nuts.

(11) Install the airbox (Refer to 9 - ENGINE/AIR INTAKE SYSTEM/AIR CLEANER ELEMENT - INSTALLATION).

SPRING

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the shock. Refer to the proper side shock removal procedure being worked on. (Refer to 2 - SUSPENSION/FRONT/SHOCK - REMOVAL).
- (4) Secure the shock assembly into a Pentastar Service Equipment W-7200 Spring compressor. (Fig. 6)
- (5) Compress the spring.



80c62e85

Fig. 6 SPRING COMPRESSOR

- 1 - SPRING COMPRESSOR
2 - SPRING

- (6) Remove the shock mount nut.
- (7) Remove the shock from the spring compressor.
- (8) Transfer the necessary parts to the type of repair being done (Insulator, Spring, shock and mount).

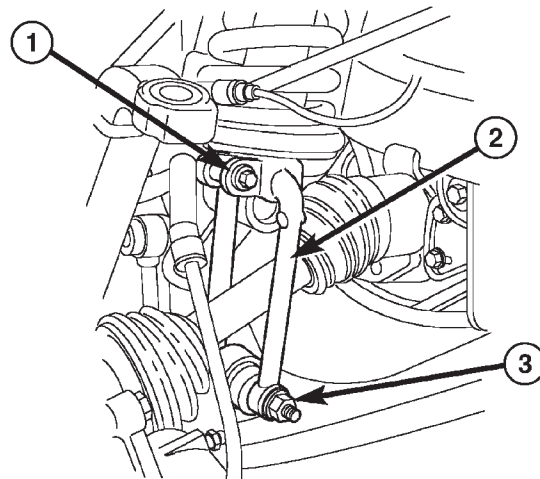
INSTALLATION

- (1) Install the shock to the spring and spring compressor. After the transfer of the necessary parts to the type of repair being done (Insulator, Spring, shock and mount).
- (2) Install the shock mounting nut. Tighten the bolt to 41 N·m (30 ft.lbs.).
- (3) Loosen the compressed spring.
- (4) Remove the shock assembly from the spring compressor.
- (5) Install the shock to the vehicle. (Refer to 2 - SUSPENSION/FRONT/SHOCK - INSTALLATION).
- (6) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).
- (7) Remove the support and lower the vehicle.

CLEVIS BRACKET

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the lower clevis bolt at the lower control arm. (Fig. 7)
- (4) Remove the upper clevis bolt at the shock. (Fig. 7)



80c62fad

Fig. 7 CLEVIS BRACKET

- 1 - UPPER BOLT
2 - CLEVIS BRACKET
3 - LOWER BOLT

- (5) Remove the lower stabilizer link bolt at the lower control arm.
- (6) Remove the lower ball joint nut.
- (7) Separate the lower ball joint from the lower control arm using tool C-4150A.
- (8) Swing the lower control arm downward to allow clearance to remove the clevis bracket.
- (9) Remove the clevis bracket from the vehicle.

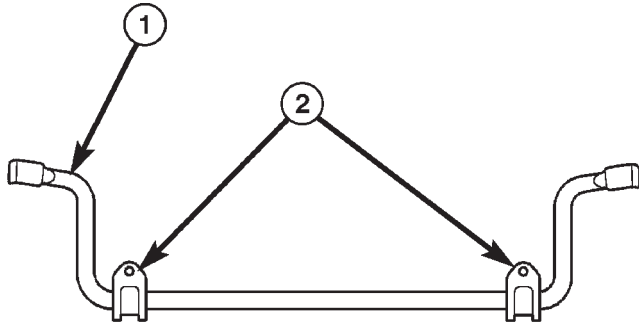
INSTALLATION

- (1) Install the clevis bracket to the shock. Tighten the bolt to 136 N·m (100 ft.lbs.) (Fig. 7).
- (2) Raise the lower control arm to the lower ball joint.
- (3) Install the nut to the lower ball joint. Tighten the nut to 81 N·m (60 ft.lbs.).
- (4) Install the clevis bracket to the lower control arm. Tighten the bolt to 150 N·m (110 ft.lbs.).
- (5) Install the lower stabilizer link bolt at the lower control arm. Tighten the bolt to 115 N·m (85 ft.lbs.).
- (6) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).
- (7) Lower the vehicle.

STABILIZER BAR

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the upper stabilizer link bolts at the stabilizer bar.
- (4) Remove the stabilizer bar bushing clamps from the frame (Fig. 8).
- (5) Remove the stabilizer bar from the vehicle.



80c62dd2

Fig. 8 SWAY BAR

- 1 - SWAY BAR
2 - SWAY BAR BUSHINGS

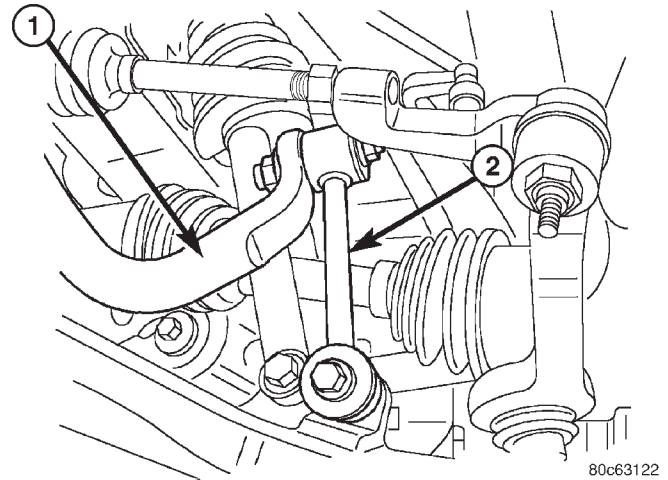
INSTALLATION

- (1) Install the stabilizer bar to the vehicle.
- (2) Install the stabilizer bar bushing clamps (Fig. 8). Tighten the nuts to 149 N·m (110 ft.lbs.).
- (3) Install the upper stabilizer link bolts and washer at the stabilizer bar. Tighten the bolt to 136 N·m (100 ft.lbs.).
- (4) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).
- (5) Lower the vehicle.

STABILIZER LINK

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the tire and wheel assembly.
- (3) Remove the lower stabilizer link bolt at the lower control arm.
- (4) Remove the upper stabilizer link bolt at the stabilizer bar.
- (5) Remove the stabilizer link. (Fig. 9)



80c63122

Fig. 9 STABILIZER BAR LINK

- 1 - STABILIZER BAR
2 - STABILIZER BAR LINK

INSTALLATION

- (1) Install the stabilizer link (Fig. 9).
- (2) Install the upper stabilizer link bolt and washer at the stabilizer bar. Tighten the bolt to 136 N·m (100 ft.lbs.).
- (3) Install the lower stabilizer link bolt and washer at the lower control arm. Tighten the nut to 115 N·m (85 ft.lbs.).
- (4) Install the tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

UPPER CONTROL ARM

REMOVAL

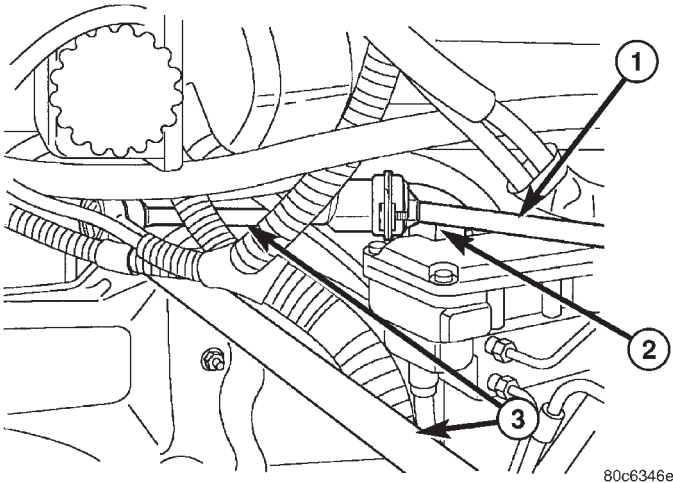
REMOVAL - RIGHT SIDE

- (1) Raise and support the vehicle.
- (2) Remove the right side tire and wheel assembly.
- (3) Remove the upper ball joint nut.
- (4) Separate the upper ball joint from the steering knuckle using tool C-4150A.
- (5) Lower the vehicle.
- (6) Remove the air box (Refer to 9 - ENGINE/AIR INTAKE SYSTEM/AIR CLEANER ELEMENT - REMOVAL).
- (7) Remove the cruise control servo mounting nuts.
- (8) Remove the upper control arm rear bolt.
- (9) Remove the upper control arm front bolt.
- (10) Remove the upper control arm from the vehicle.

UPPER CONTROL ARM (Continued)

REMOVAL - LEFT SIDE

- (1) Raise and support the vehicle.
- (2) Remove the left side tire and wheel assembly.
- (3) Remove the upper ball joint nut.
- (4) Separate the upper ball joint from the steering knuckle using tool C-4150A.
- (5) Lower the vehicle.
- (6) Remove the battery (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/BATTERY - REMOVAL).
- (7) Unclip the power center and move it to the side out of the way.
- (8) Remove the battery tray (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/TRAY - REMOVAL).
- (9) Disconnect the battery temperature sensor from the battery tray.
- (10) Remove the upper control arm rear bolt by using a ratchet and extension under the steering shaft and positioned by the power steering reservoir. (Fig. 10)

**Fig. 10 REAR BOLT**

- 1 - STEERING SHAFT
2 - REAR BOLT
3 - RATCHET WITH AN EXTENSION

- (11) Remove the upper control arm front bolt.
- (12) Remove the upper control arm from the vehicle.

INSTALLATION**INSTALLATION - RIGHT SIDE**

- (1) Install the upper control arm to the vehicle.
- (2) Install the upper control arm front bolt. Tighten the bolt to 122 N·m (90 ft.lbs.).
- (3) Install the upper control arm rear bolt. Tighten the bolt to 122 N·m (90 ft.lbs.).
- (4) Install the cruise control servo mounting nuts.

(5) Install the air box (Refer to 9 - ENGINE/AIR INTAKE SYSTEM/AIR CLEANER ELEMENT - INSTALLATION).

(6) Install the upper ball joint nut. Tighten the nut to 81 N·m (60 ft.lbs.).

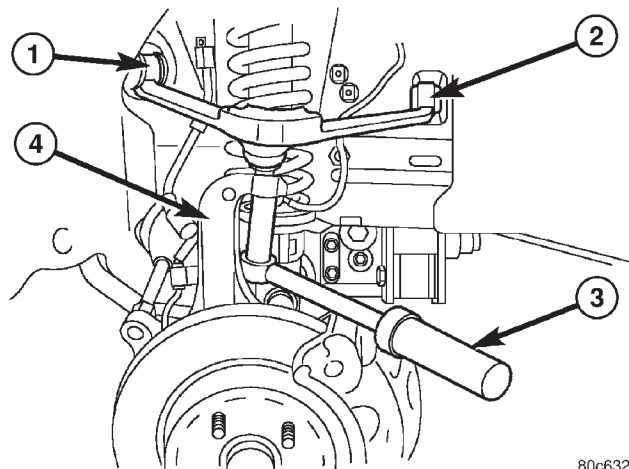
(7) Install the right side tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

(8) Lower the vehicle.

(9) Set the toe and center the steering wheel (Refer to 2 - SUSPENSION/WHEEL ALIGNMENT - STANDARD PROCEDURE).

INSTALLATION - LEFT SIDE

- (1) Install the upper control arm to the vehicle.
- (2) Install the upper control arm front bolt (Fig. 11). Tighten the bolt to 122 N·m (90 ft.lbs.).
- (3) Install the upper control arm rear bolt (Fig. 11). Tighten the bolt to 122 N·m (90 ft.lbs.).
- (4) Reconnect the battery temperature sensor to the battery tray.
- (5) Install the battery tray (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/TRAY - INSTALLATION).
- (6) Install the battery (Refer to 8 - ELECTRICAL/BATTERY SYSTEM/BATTERY - INSTALLATION).
- (7) Reclip and mount the power center.
- (8) Install the upper ball joint nut (Fig. 11). Tighten the nut to 81 N·m (60 ft.lbs.).

**Fig. 11 UPPER CONTROL ARM**

(9) Install the left side tire and wheel assembly. (Refer to 22 - TIRES/WHEELS/WHEELS - STANDARD PROCEDURE).

(10) Lower the vehicle.

(11) Set the toe and center the steering wheel (Refer to 2 - SUSPENSION/WHEEL ALIGNMENT - STANDARD PROCEDURE).

REAR

TABLE OF CONTENTS

	page		page
REAR		INSTALLATION	19
DESCRIPTION	16	UPPER BALL JOINT	
WARNING	16	REMOVAL	20
DIAGNOSIS AND TESTING - REAR		INSTALLATION	20
SUSPENSION	17	UPPER CONTROL ARM	
SPECIFICATIONS		DESCRIPTION - UPPER SUSPENSION ARM, BUSHINGS, AND BALL JOINT	20
TORQUE CHART	17	OPERATION - UPPER SUSPENSION ARM, BUSHINGS, AND BALL JOINT	20
SHOCK		REMOVAL	20
REMOVAL	18	INSTALLATION	21
INSTALLATION	18	LOWER CONTROL ARM	
SPRING		DESCRIPTION	21
REMOVAL	18	OPERATION	21
INSTALLATION	18	REMOVAL	21
OUNCE BUMPER		INSTALLATION	21
REMOVAL	19		
INSTALLATION	19		
STABILIZER BAR			
REMOVAL	19		

REAR

DESCRIPTION

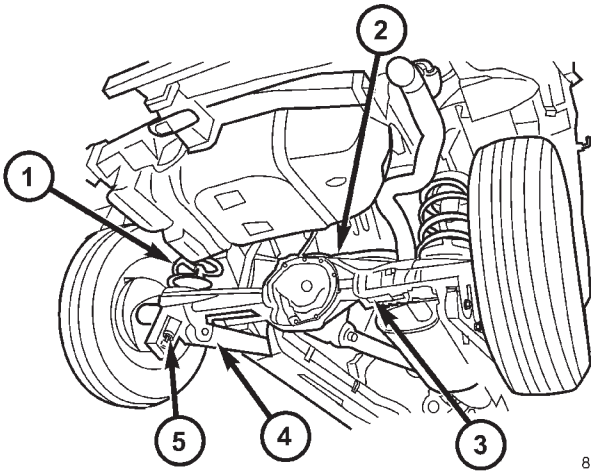
The rear suspension (Fig. 1) is comprised of :

- Drive axle
- Shock absorbers
- Coil springs
- Lower suspension arms
- Upper suspension arm
- Stabilizer bar

CAUTION: Suspension components with rubber/urethane bushings should be tightened with the vehicle at normal ride height. It is important to have the springs supporting the weight of the vehicle when the fasteners are torqued. This will maintain vehicle ride comfort and prevent premature bushing wear.

WARNING

WARNING:: Suspension components with rubber bushings must be tightened with the vehicle at normal ride 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 will be affected and cause premature bushing wear.



80c86ea2

Fig. 1 REAR SUSPENSION

- 1 - COIL SPRING
- 2 - UPPER SUSPENSION ARM
- 3 - STABILIZER BAR
- 4 - LOWER SUSPENSION ARM
- 5 - SHOCK

REAR (Continued)

DIAGNOSIS AND TESTING - REAR SUSPENSION

CONDITION	POSSIBLE CAUSES	CORRECTION
VEHICLE INSTABILITY	1. Loose or worn wheel bearings. 2. Loose, worn or bent suspension components. 3. Tire pressure.	1. Replace wheel bearings. 2. Inspect, tighten or replace components as necessary. 3. Adjust tire pressure.
VEHICLE PULLS TO ONE SIDE	1. Weak or broken spring. 2. Alignment. 3. Tires. 4. Brakes.	1. Replace spring. 2. Align vehicle to specifications. 3. Replace tires. 4. Repair as necessary.
KNOCKING, RATTLING OR SQUEAKING	1. Worn shock bushings. 2. Loose shock mounting. 3. Shock valve. 4. Loose upper ball joint. 5. Loose, worn or bent suspension components.	1. Replace shock. 2. Tighten to specifications. 3. Replace shock. 4. Replace ball joint. 5. Inspect, tighten or replace components as necessary.
IMPROPER TRACKING	1. Loose, worn or bent suspension components. 2. Bent axle.	1. Inspect, tighten or replace components as necessary. 2. Replace axle.

SPECIFICATIONS**TORQUE CHART***TORQUE SPECIFICATIONS*

DESCRIPTION	N·m	Ft. Lbs.	In. Lbs.
Shock Absorber Upper Nut	108	80	—
Shock Absorber Lower Nut	115	85	—
Suspension Arm Upper Ball Joint Nut	95	70	—
Suspension Arm Upper Frame Bolts	100	74	—
Rear Upper Ball Joint Bracket Bolts	136	100	—
Suspension Arms Lower Body/Axle Bracket Nut	163	120	—
Suspension Arms Lower Frame Bracket Nut	163	120	—
Stabilizer Bar Bolts	99	73	—

SHOCK

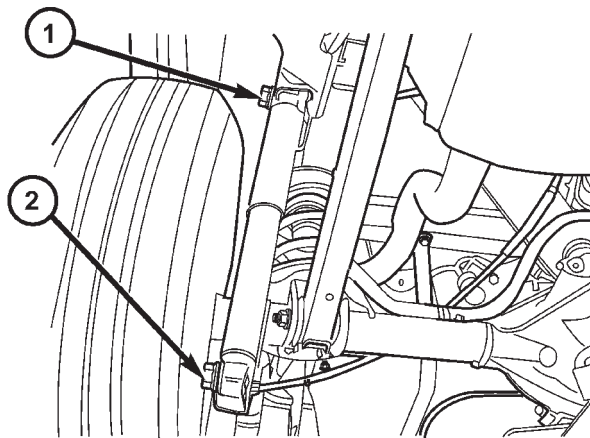
REMOVAL

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

CAUTION: Do not allow the axle to hang from the upper suspension arm ball joint.

(2) Remove the upper nut and bolt from the frame bracket (Fig. 2).

(3) Remove the lower nut and bolt from the axle bracket. Remove the shock absorber.



80c86f76

Fig. 2 SHOCK ABSORBER

- 1 - UPPER MOUNTING BOLT
- 2 - LOWER MOUNTING BOLT

INSTALLATION

(1) Install the shock absorber in the frame bracket and install the bolt and nut (Fig. 2).

(2) Install the shock absorber in the axle bracket and install the bolt and nut (Fig. 2).

(3) Remove the supports and lower the vehicle.

(4) Tighten the upper mounting nuts to 108 N·m (80 ft. lbs.). Tighten the lower mounting nuts to 115 N·m (85 ft. lbs.).

SPRING

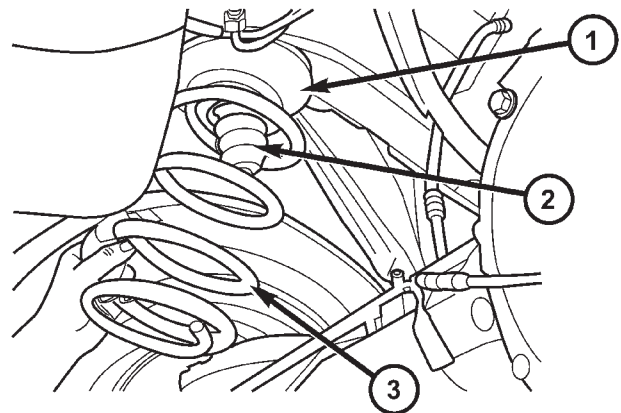
REMOVAL

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

(2) Remove the shock absorber lower bolt from the axle bracket.

(3) Lower the hydraulic jack and tilt the axle and remove the coil spring (Fig. 3).

(4) Remove and inspect the upper and lower spring isolators (Fig. 3).



80c86f68

Fig. 3 COIL SPRING

- 1 - UPPER INSULATOR
- 2 - JOUNCE BUMPER
- 3 - COIL SPRING

INSTALLATION

(1) Install the upper isolator (Fig. 3).

(2) Install the lower isolator (Fig. 3).

(3) Pull down on the axle and position the coil spring in the lower isolator.

CAUTION: Ensure the spring is positioned on the lower isolator.

(4) Raise the axle with the hydraulic jack.

(5) Install the shock absorber to the axle bracket and tighten to 115 N·m (85 ft. lbs.).

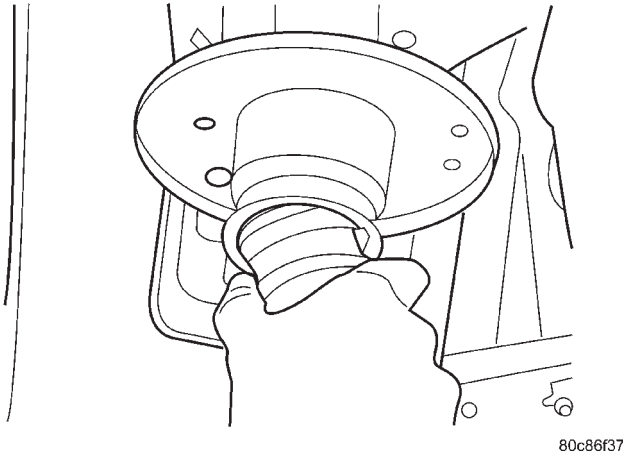
(6) Remove the supports and lower the vehicle.

(7) Tighten the stabilizer bar links to 99 N·m (73 ft. lbs.).

JOUNCE BUMPER

REMOVAL

- (1) Remove the shock (Refer to 2 - SUSPENSION/REAR/SHOCK - REMOVAL).
- (2) Remove the coil spring (Refer to 2 - SUSPENSION/REAR/SPRING - REMOVAL).
- (3) Pull the jounce bumper downwards to remove. (Fig. 4)

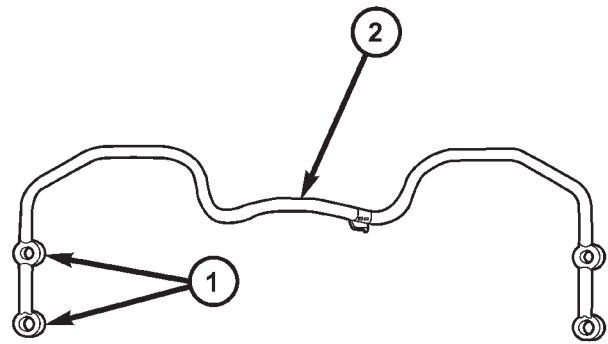


80c86f37

Fig. 4 JOUNCE BUMPER

INSTALLATION

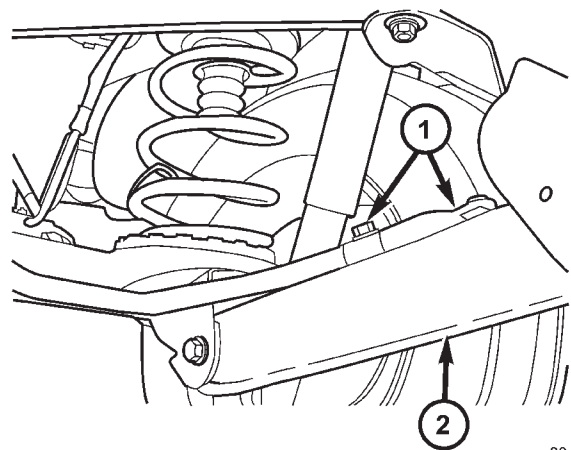
- (1) Install the jounce bumper into the mount by twisting the bumper into place (Fig. 4).
- (2) Install the coil spring (Refer to 2 - SUSPENSION/REAR/SPRING - INSTALLATION).
- (3) Install the shock (Refer to 2 - SUSPENSION/REAR/SHOCK - INSTALLATION).



80c86eb9

Fig. 5 REAR STABILIZER BAR

- 1 - MOUNTING HOLES
- 2 - STABILIZER BAR



80c86eb2

Fig. 6 STABILIZER BAR MOUNTS

- 1 - STABILIZER BAR MOUNTING BOLTS
- 2 - LOWER SUSPENSION ARM

STABILIZER BAR

REMOVAL

- (1) Raise and support the vehicle.
- (2) Remove the stabilizer bar bolts from the lower suspension arm. (Fig. 5).
- (3) Remove the stabilizer bar.

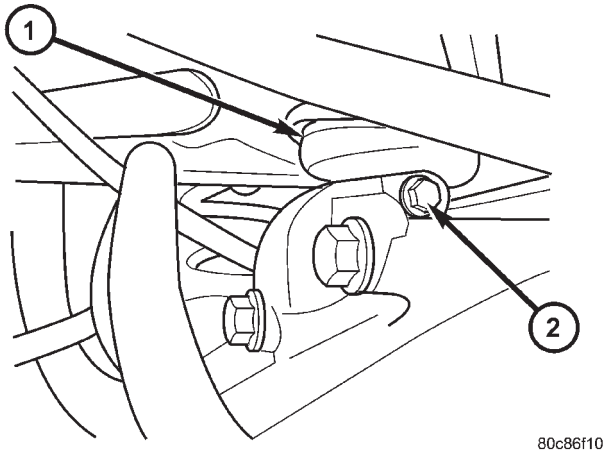
INSTALLATION

- (1) Position the stabilizer bar over the axle and install the bolts to the lower suspension arm (Fig. 6). Ensure the bar is centered with equal spacing on both sides. Tighten the bolts to 99 N·m (73 ft. lbs.).
- (2) Remove support and lower the vehicle.

UPPER BALL JOINT

REMOVAL

- (1) Raise and support the vehicle.
- (2) Support the rear axle with a hydraulic jack.
- (3) Remove the ball joint pinch bolt from the top of the axle. (Fig. 7)
- (4) Separate the ball joint arm assembly from the differential housing by prying upwards.



80c86f10

Fig. 7 BALL JOINT PINCH BOLT

- 1 - UPPER BALL JOINT
2 - PINCH BOLT

INSTALLATION

- (1) Raise the rear axle with a hydraulic jack to align the ball joint with the differential housing bracket.
- (2) Insert the ball joint into the differential housing bracket.
- (3) Install the ball joint pinch bolt and tighten to 95 N·m (70 ft. lbs.). (Fig. 7).
- (4) Remove the supports and lower the vehicle.

UPPER CONTROL ARM

DESCRIPTION - UPPER SUSPENSION ARM, BUSHINGS, AND BALL JOINT

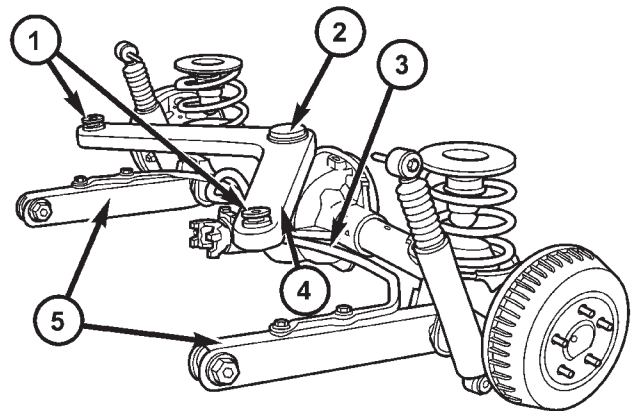
The suspension arm uses vertical spool bushings to isolate road noise. The suspension arm is bolted through bushings to cage nuts in the body and a ball joint to the top of the differential housing.

OPERATION - UPPER SUSPENSION ARM, BUSHINGS, AND BALL JOINT

The upper suspension arm provides fore/aft and lateral location of the rear axle. The suspension arm travel is limited through the use of jounce bumpers in compression and shock absorbers in rebound.

REMOVAL

- (1) Raise and support the vehicle.
- (2) Support the rear axle with a hydraulic jack.
- (3) Remove the ball joint pinch bolt from the top of the differential housing bracket (Fig. 7).
- (4) Remove partial nuts from the heat shield in order to lower the shield down enough to get the proper clearance to remove the right side bolt from the body.
- (5) Remove the upper suspension arm mounting bolts from the body and remove the arm (Fig. 8).

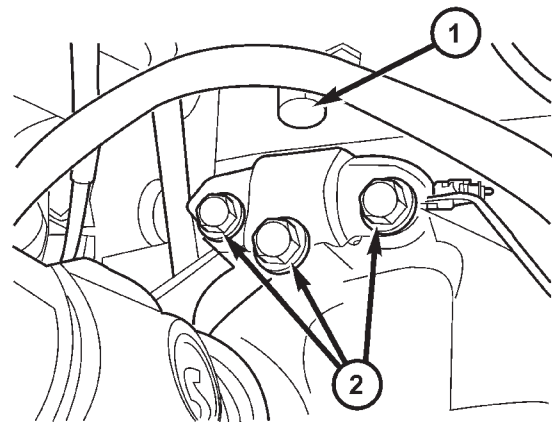


80cb181c

Fig. 8 UPPER CONTROL ARM

- 1 - BODY MOUNTS
2 - UPPER BALL JOINT
3 - STABILIZER BAR
4 - UPPER CONTROL ARM
5 - LOWER CONTROL ARM

- (6) Remove the support bracket mounting bolts if needed. (Fig. 9)



80c86f8e

Fig. 9 BALL JOINT BRACKET

- 1 - UPPER BALL JOINT
2 - SUPPORT BRACKET BOLTS

UPPER CONTROL ARM (Continued)

INSTALLATION

- (1) Position the upper suspension arm in the frame rail brackets (Fig. 8).
- (2) Install the mounting bolts and tighten to 100 N·m (74 ft. lbs.).
- (3) Retighten the heat shield back into place.
- (4) Pull the arm down on the differential housing bracket and install the pinch bolt and nut. Tighten the nut to 95 N·m (70 ft. lbs.) (Fig. 7).
- (5) Remove the supports and lower the vehicle.

LOWER CONTROL ARM

DESCRIPTION

The lower suspension arms are stamped steel and welded and use voided round bushings at the axle end and solid rubber at the body end of the arm.

OPERATION

The bushings provide isolation from the axle. The arms mount to the unibody frame rail bracket and the axle brackets. The arm and bushings provide location and react to loads.

REMOVAL

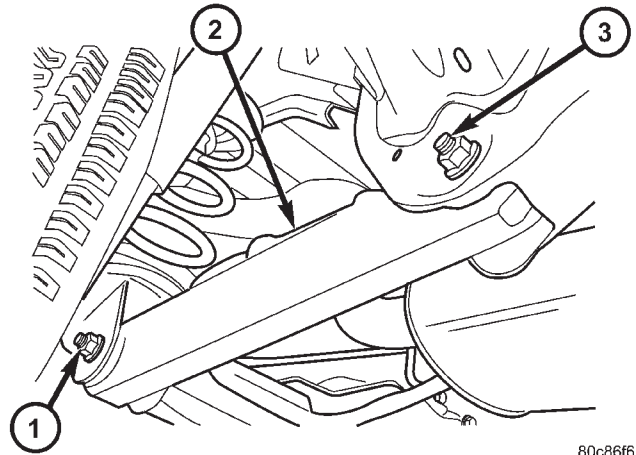
- (1) Raise the vehicle and support the rear axle.
- (2) Remove the stabilizer bar retaining bolts from the suspension arm.
- (3) Remove the lower suspension arm nut and bolt from the axle bracket (Fig. 10).

NOTE: When removing the right side suspension arm from the frame rail it will be necessary to pry the exhaust over slightly to allow enough clearance to remove the bolt.

- (4) Remove the nut and bolt (Fig. 10) from the frame rail and remove the lower suspension arm.

INSTALLATION

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



80c86f61

Fig. 10 LOWER SUSPENSION ARM

- 1 - AXLE BRACKET BOLT
2 - LOWER CONTROL ARM
3 - BODY BRACKET BOLT

NOTE: The end of the arm with the voided round bushing attaches to the axle bracket.

- (2) Install the axle bracket bolt and nut finger tight (Fig. 10).

NOTE: When installing the right side suspension arm to the frame rail it will be necessary to pry the exhaust over slightly to allow enough clearance to install the bolt.

- (3) Install the frame rail bracket bolt and nut finger tight.
- (4) Install the stabilizer bar retaining bolts to the suspension arm.
- (5) Remove the supports and lower the vehicle.
- (6) With the vehicle on the ground tighten the nut at the frame to 163 N·m (120 ft. lbs.). Tighten the nut at the axle bracket to 163 N·m (120 ft. lbs.).