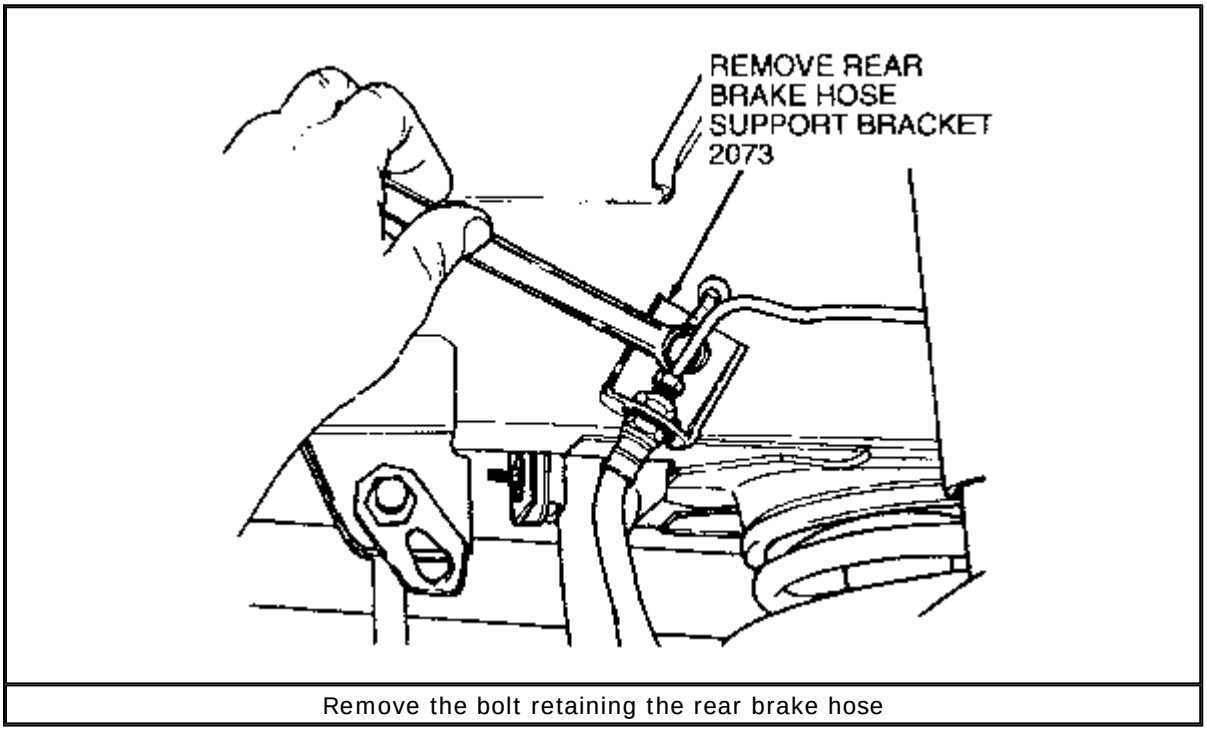
REAR SUSPENSION

Coil Springs

REMOVAL & INSTALLATION

Station Wagon Only

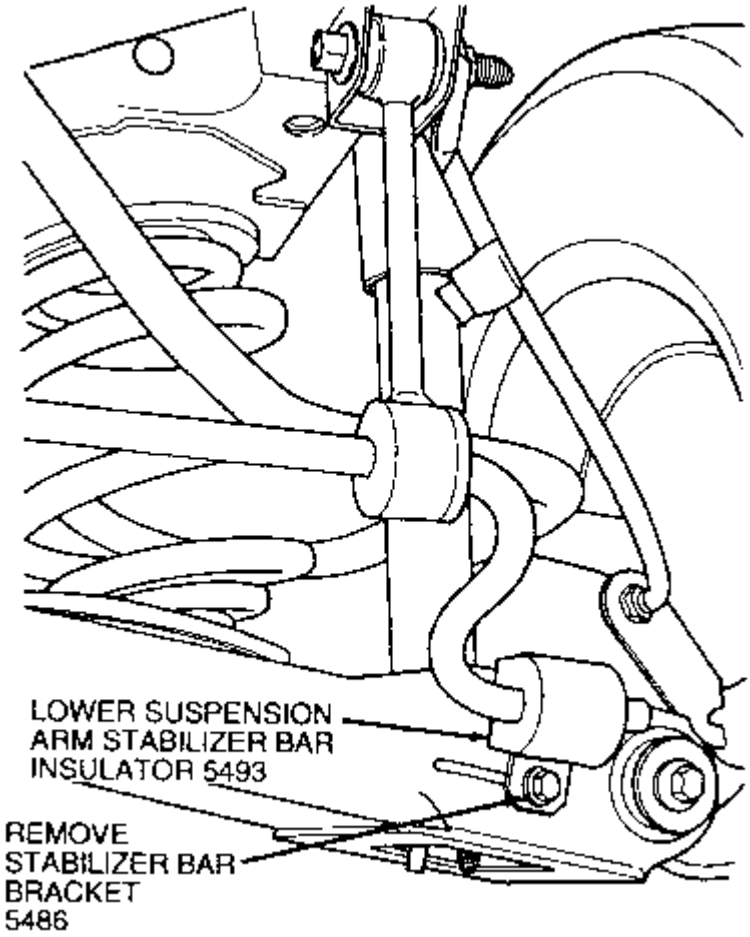
1. **Raise the rear of the vehicle and support safely on the pads of the underbody forward of the tension strut bracket. Position a floor jack under the lower suspension arm and raise the lower arm to normal curb height.**
2. **Remove the wheel and tire assembly.**
3. **Locate the bracket retaining the flexible brake hose to the body. Remove the bracket retaining bolt and bracket from the body.**



Remove the bolt retaining the rear brake hose

Click to enlarge

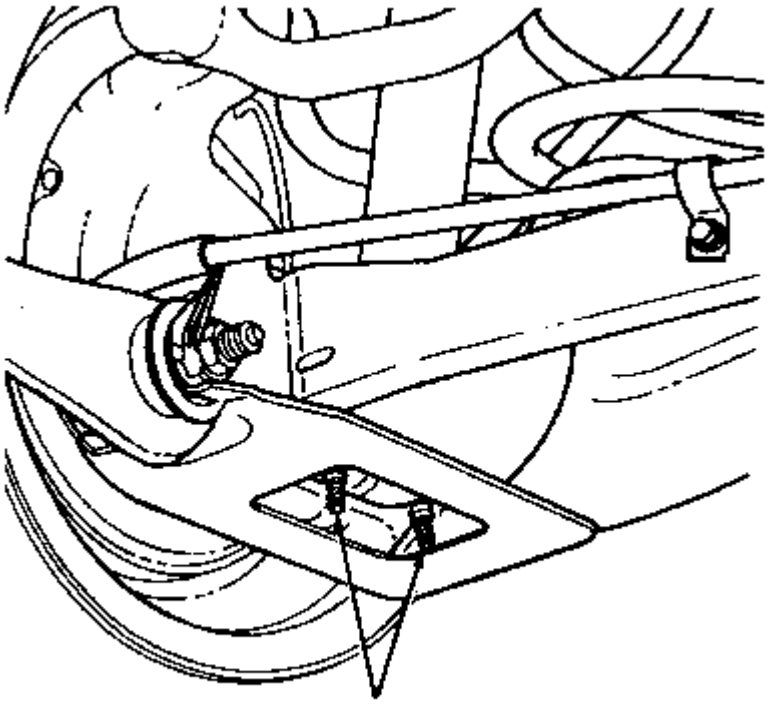
4. **Remove the stabilizer bar U-bracket from the lower suspension arm and bushing.**



Remove the stabilizer bar U-bracket from the lower suspension arm and bushing

Click to enlarge

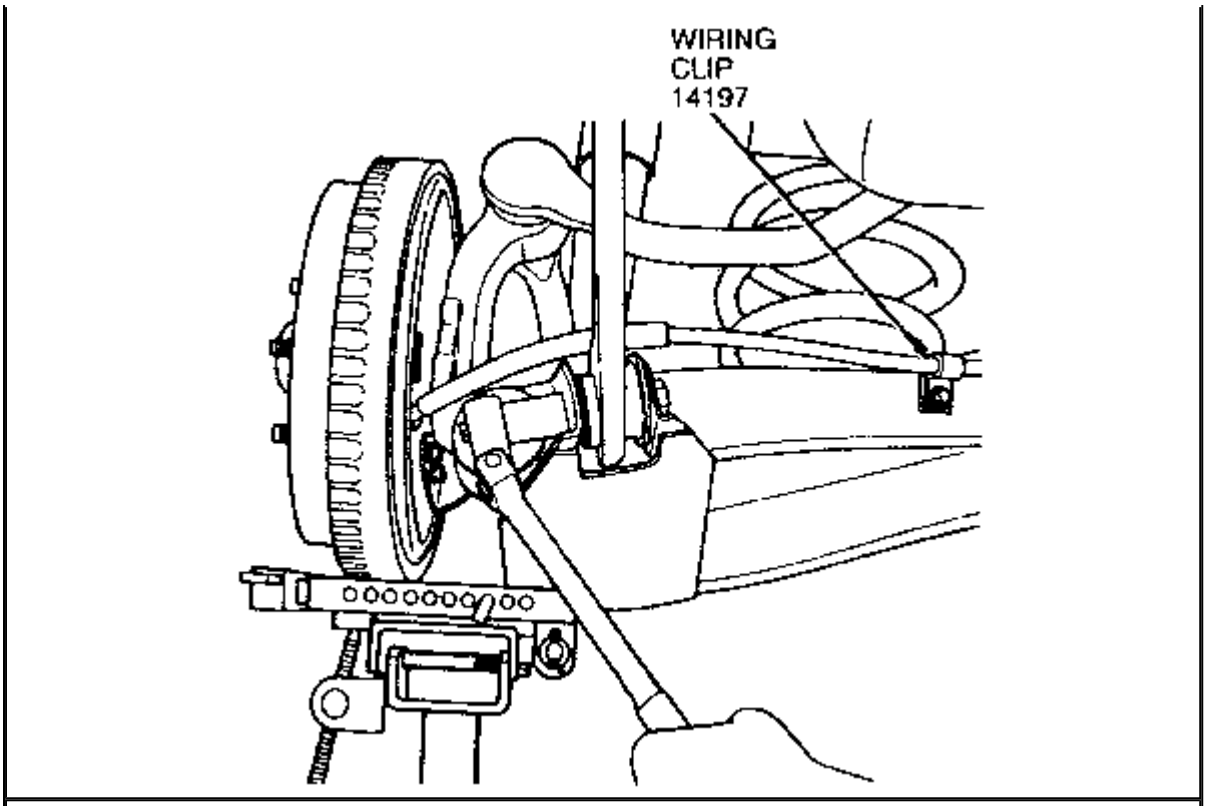
5. **Remove and discard the nuts attaching the shock absorber to the lower suspension arm and bushing.**



After removing the nuts attaching the shock absorber to the lower suspension arm and bushing, discard them and replace with new ones during installation

Click to enlarge

6. **Disconnect and remove the parking brake cable and clip from the lower suspension arm and bushing.**
7. **If equipped with rear disc brakes, remove the ABS cable from the clips on the lower suspension arm.**
8. **Remove and discard the bolt and nut attaching the tension strut and bushing to the lower suspension arm.**
9. **Suspend the spindle and upper suspension arms from the body with a piece of wire to prevent them from dropping down.**

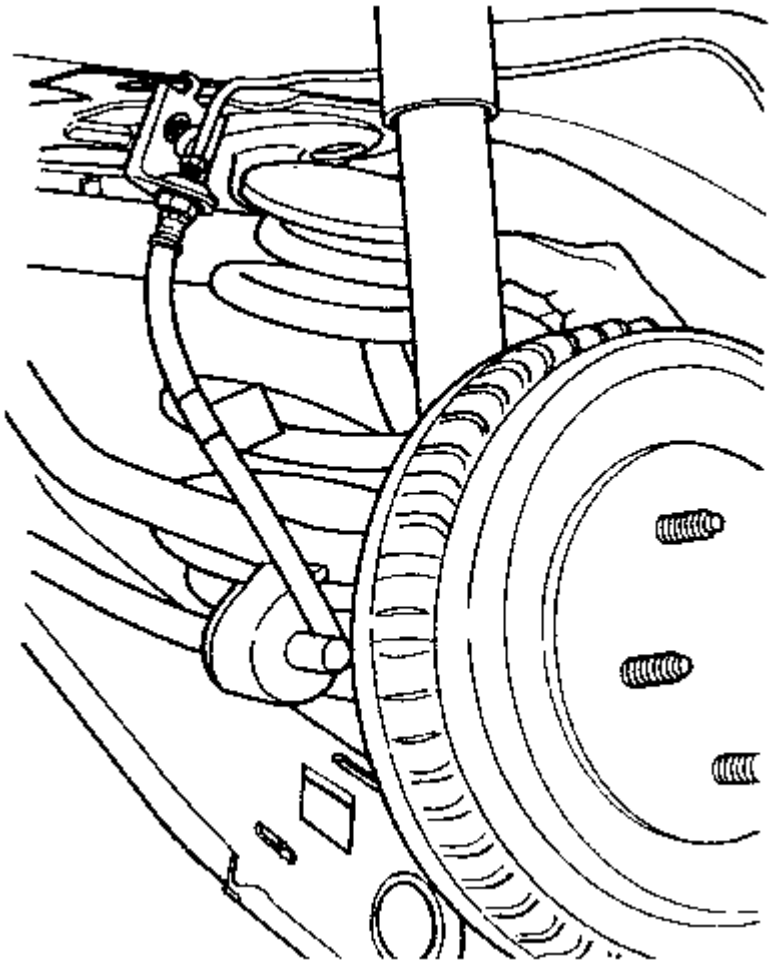


Suspend the spindle and upper suspension arms from the body with a piece of wire to prevent them from dropping down

Click to enlarge

10. **Remove the nut, bolt, washer and adjusting cam that retain the lower suspension arm to the spindle. Discard the nut, bolt and washer and replace with new ones during installation, then set the cam aside.**

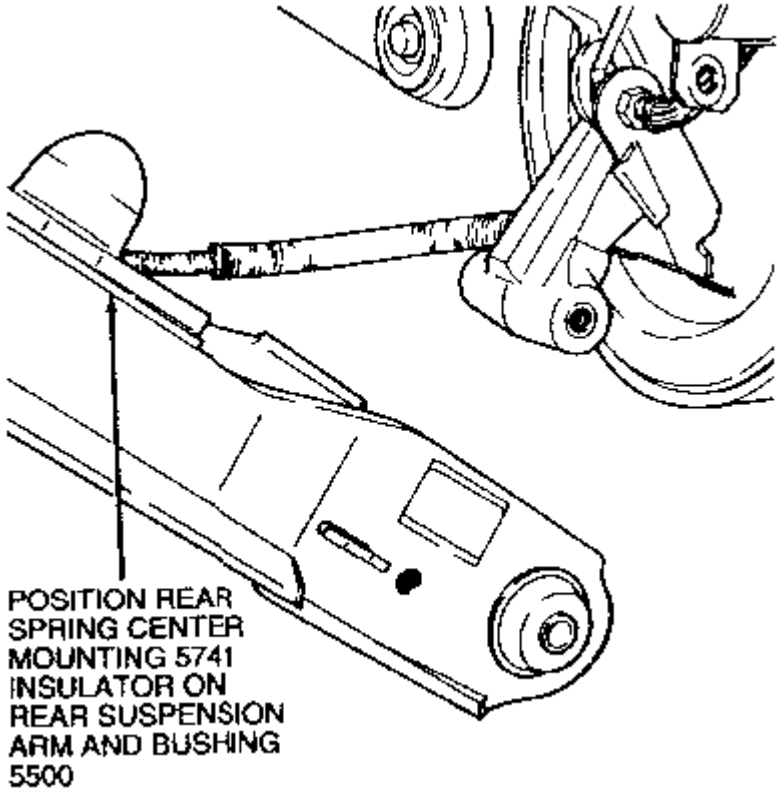
11. **With the floor jack, slowly lower the suspension arm until the spring, lower and upper insulators can be removed. Replace the spring and insulators as required.**



With the floor jack, slowly lower the suspension arm until the spring, lower and upper insulators can be removed. Replace the spring and insulators as required

To install:

12. **Position the spring center mounting insulator on the lower suspension arm, then press the insulator downward into place. Make certain the insulator is properly seated.**

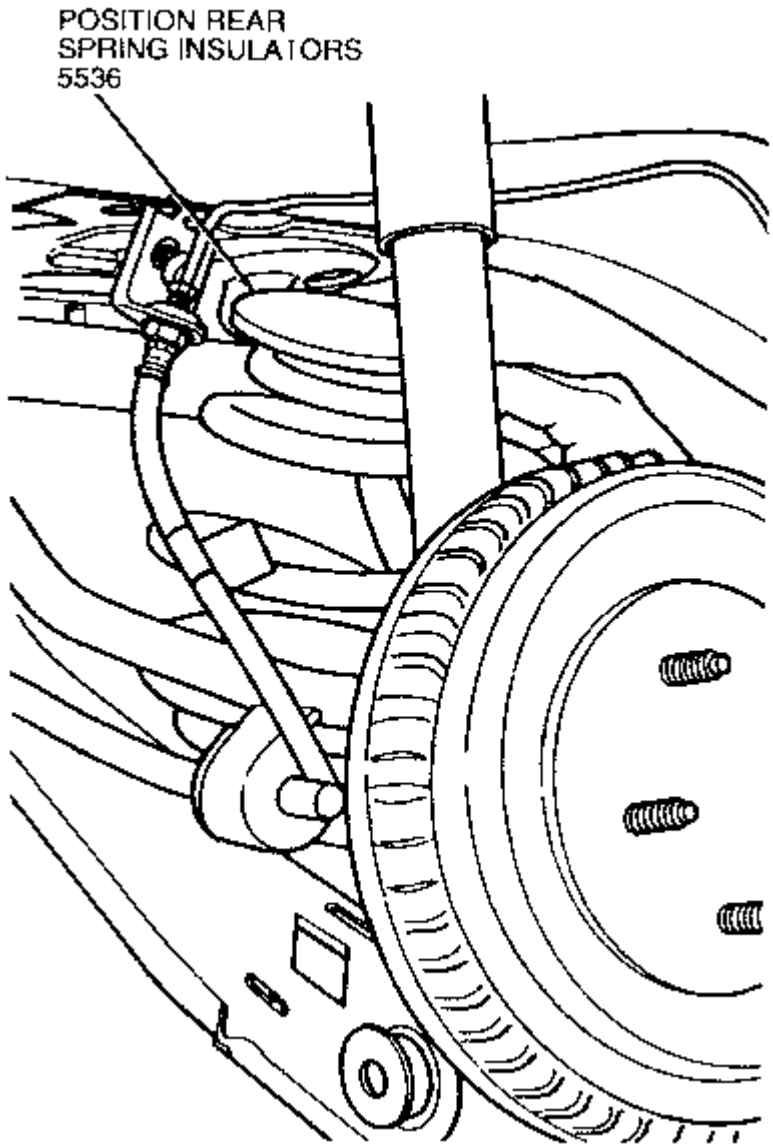


Installing the center mounting insulator on the lower suspension arm

Click to enlarge

13. **Position the upper insulator on top of the spring. Install the spring on the lower suspension arm. Make certain the spring is properly seated.**

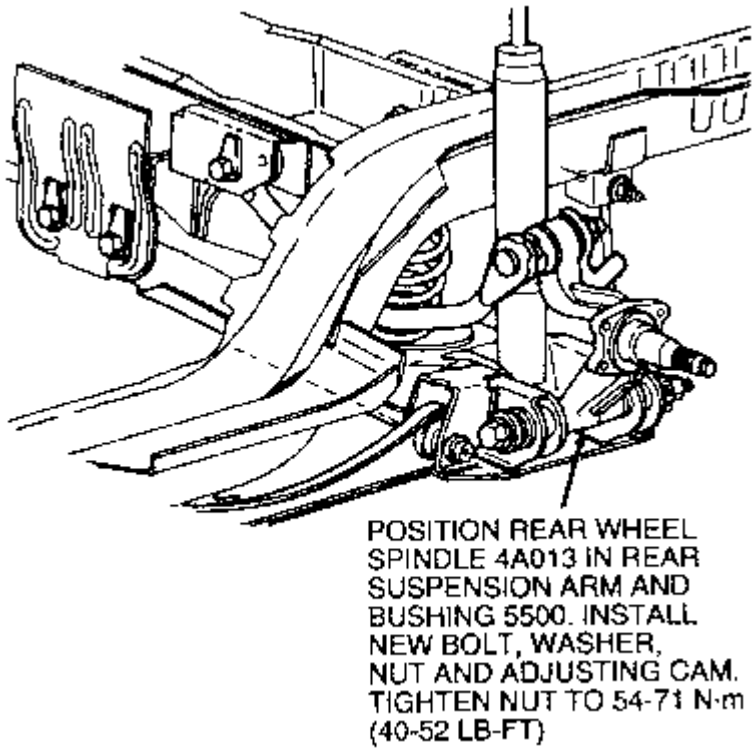
14. **With the floor jack, slowly raise the suspension arm. Guide the upper spring insulator onto the upper spring underbody seat.**



With the floor jack, slowly raise the suspension arm. Guide the upper spring insulator onto the upper spring underbody seat

Click to enlarge

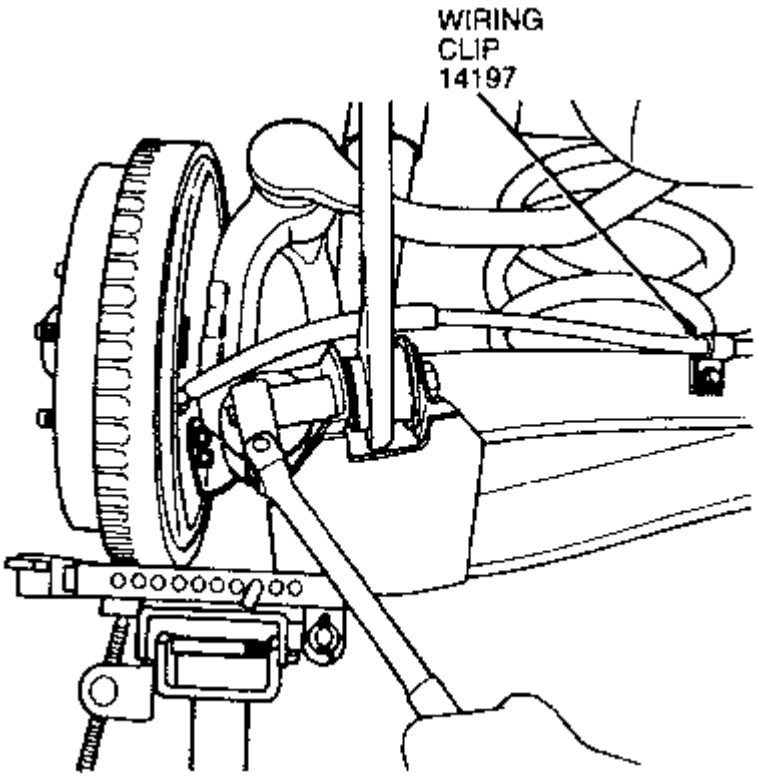
15. **Position the rear wheel spindle in the lower suspension arm and bushing, with a new bolt, washer, nut, and the existing cam. Install the bolt with its head toward the front of the vehicle, but do NOT tighten the bolt at this time.**



Position the rear wheel spindle in the lower suspension arm and bushing, using a new bolt, nut washer, and the existing cam. Install the bolt with the head of the bolt toward the front of the vehicle, but do NOT tighten the bolt at this time

Click to enlarge

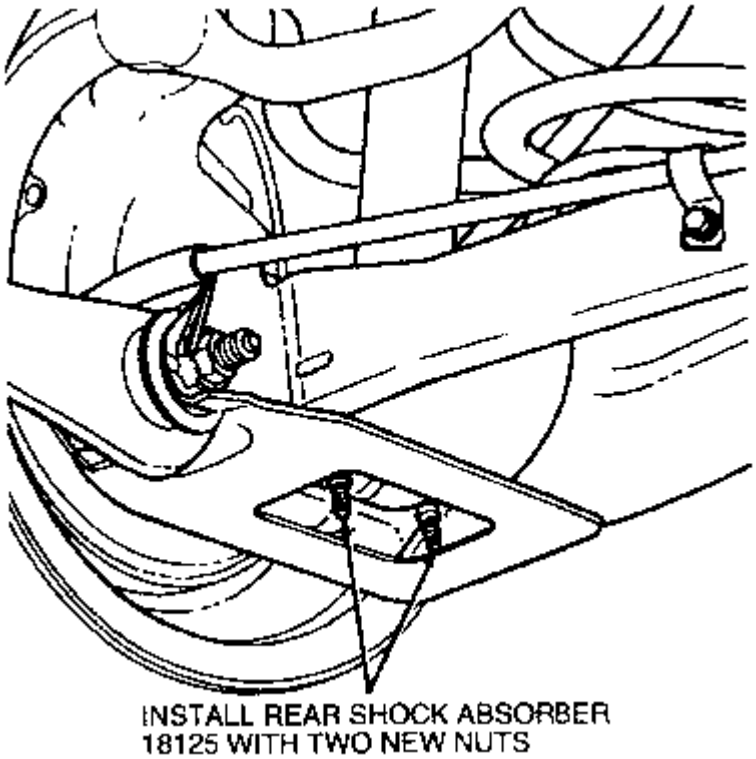
16. **Remove the wire supporting the spindle and suspension arms.**
17. **Install the tension strut and bushing in the lower suspension arm using a new nut and bolt; but do NOT tighten at this time.**
18. **Attach the parking brake cable and clip to the lower suspension arm.**
19. **If equipped with rear disc brakes, install the ABS cable into the clips on the lower suspension arm.**



If equipped with rear disc brakes, install the ABS cable into the clips on the lower suspension arm

Click to enlarge

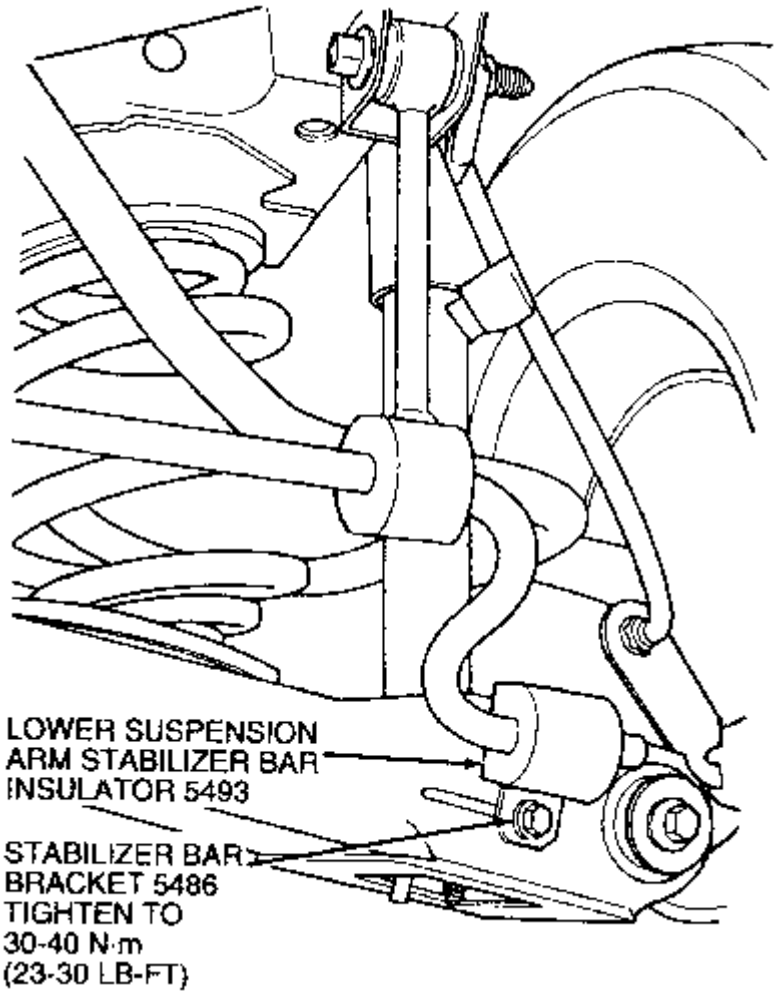
20. **Position the shock absorber on the lower suspension arm, then install two new nuts. Tighten the nuts to 15-19 ft. lbs. (20-26 Nm).**



When installing the shock absorber on the lower arm, install new retaining nuts

Click to enlarge

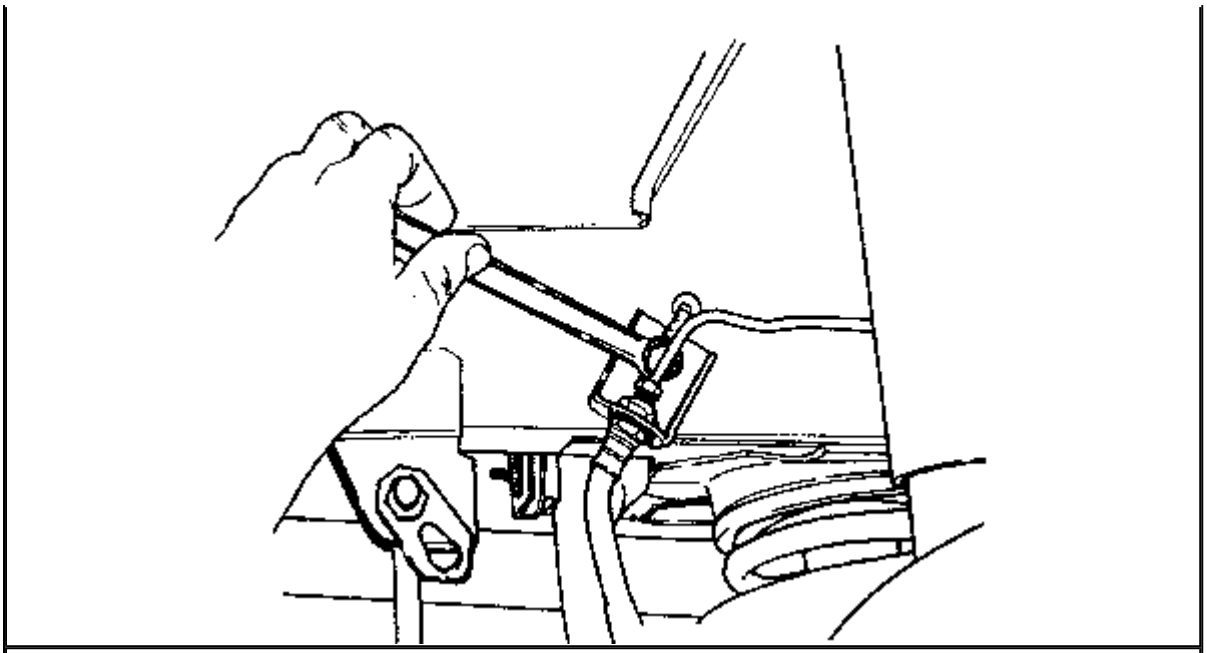
21. **Attach the stabilizer U-bracket to the lower suspension arm using a new bolt. Tighten the bolt to 23-30 ft. lbs. (31-40 Nm).**



Attach the stabilizer U-bracket to the lower suspension arm using a new bolt. Tighten the bolt to 23-30 ft. lbs. (31-40 Nm)

Click to enlarge

22. **Attach the flexible brake hose bracket to the body, then tighten the retaining bolt to 8-12 ft. lbs. (11-16 Nm).**



Attach the flexible brake hose bracket to the body, then tighten the retaining bolt to 8-12 ft. lbs. (11-16 Nm)

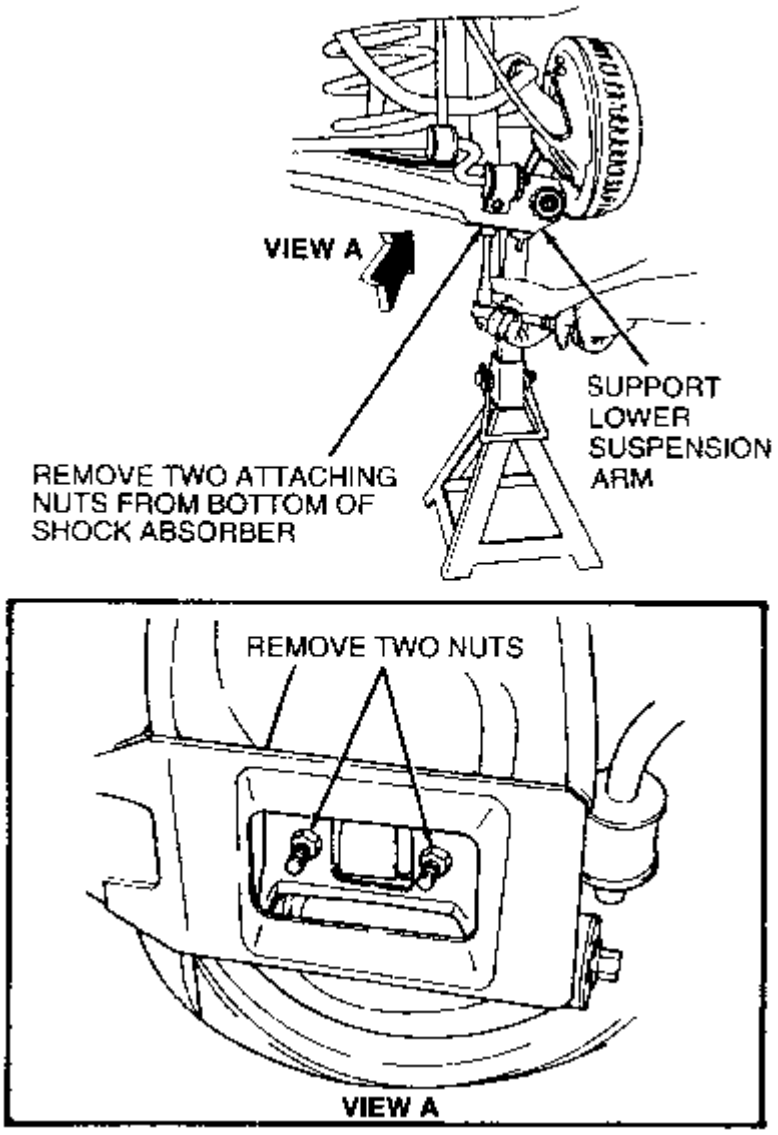
23. **With the floor jack, raise the lower suspension to normal curb height. Tighten the lower suspension arm to 40-52 ft. lbs. (54-71 Nm). Tighten the bolt that attaches the tension strut to the body bracket to 40-52 ft. lbs. (54-71 Nm).**
24. **Install the wheel and tire assembly. Remove the floor jack, then carefully lower the vehicle.**

Shock Absorbers

REMOVAL & INSTALLATION

Station Wagon Only

1. **Raise and safely support the vehicle.**
2. **Remove the wheel and tire assembly.**
3. **Position a jackstand under the lower suspension arm.**
4. **Slightly lower the vehicle to put the suspension at the normal position, then remove the two nuts retaining the shock absorber to the lower suspension arm.**



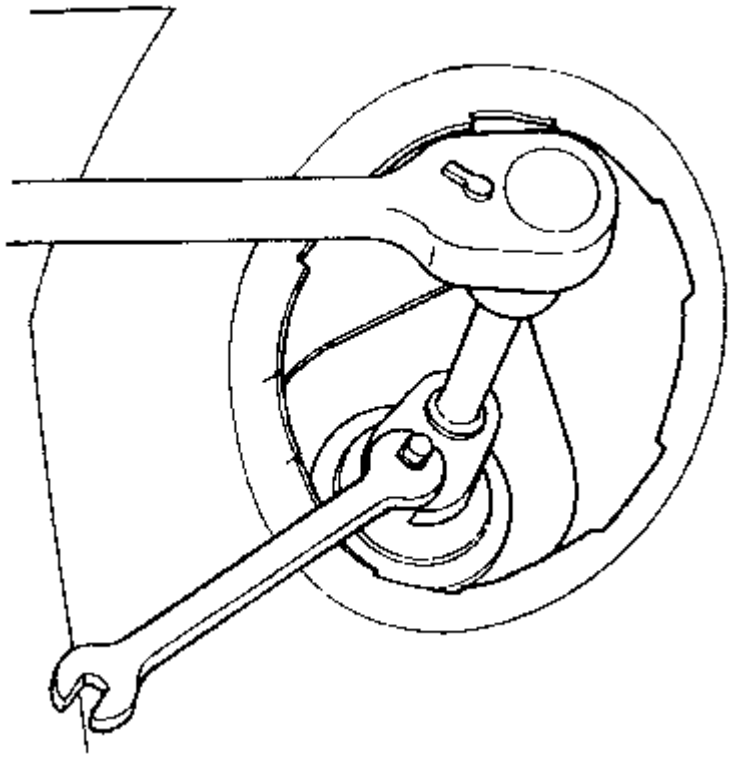
Removing the two shock absorber-to-lower suspension arm retaining nuts

Click to enlarge

5. From inside the vehicle, remove the rear compartment access panels.

If the shock absorber is to be reused, do not grip the shaft with pliers or vise grips. Gripping the shaft in this manner will damage the shaft surface finish and will result in severe oil leakage.

6. Remove and discard the top shock absorber attaching nut using a crow's foot wrench and ratchet, while holding the shock absorber shaft stationary with an open-end wrench.



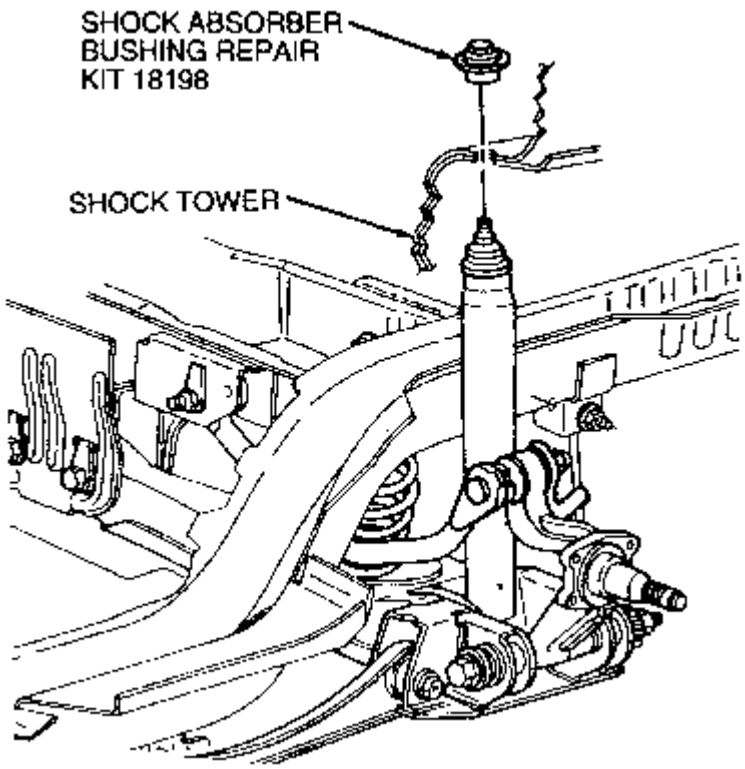
Remove and discard the top shock absorber attaching nut using a crow's foot wrench and ratchet, while holding the shock absorber shaft stationary with an open end wrench

7. **Remove the rubber insulator from the shock, then remove the shock from the vehicle.**

The shock absorbers are gas filled. It may require extra effort to remove the shock from the lower arm.

To install:

8. **Install a new washer and insulator assembly on the upper shock absorber rod.**
9. **Maneuver the upper part of the shock absorber into the shock tower opening in the body. Push slowly on the lower part of the shock absorber until the mounting studs are aligned with the mounting holes in the lower suspension arm.**
10. **Install new lower attaching nuts, but do not tighten at this time.**
11. **Install a new shock absorber bushing repair kit, washer and nut on top of the shock absorber. Tighten the nut to 19-25 ft. lbs. (26-34 Nm).**

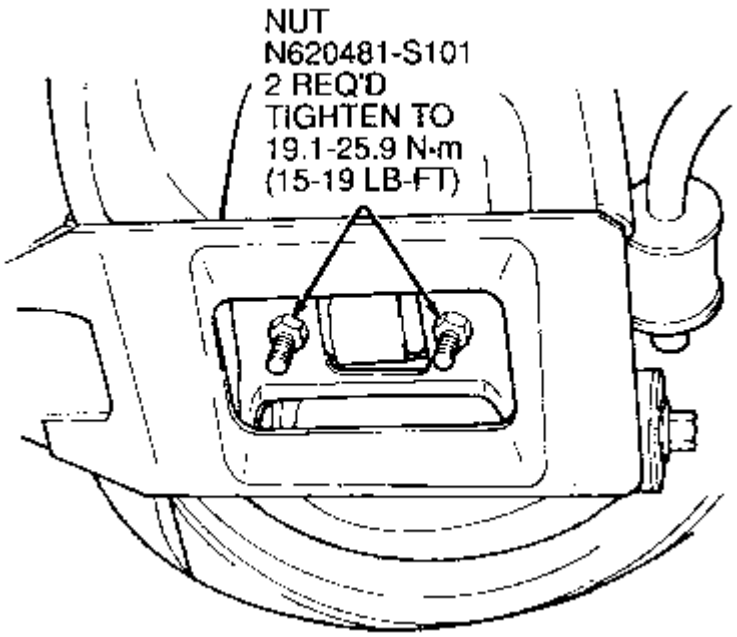


Install a new shock absorber bushing repair kit, washer and nut on top of the shock absorber. Tighten the nut to 19-25 ft. lbs. (26-34 Nm)

Click to enlarge

12. **Install the rear compartment access panel.**

13. **Tighten the two lower attaching nuts to 15-19 ft. lbs. (19-30 Nm).**



Tighten the two lower attaching nuts to 15-19 ft. lbs. (19-30 Nm)

Click to enlarge

14. **Install the wheel and tire assembly. Remove the safety stand supporting the lower**

suspension arm, then carefully lower the vehicle.

TESTING

1. Visually inspect the shock absorber for signs of leakage.
2. If one shock absorber is leaking, replace both shock absorbers.
3. Stand back and look at the vehicle. If it sags on one end check the shocks; if defective replace them.
4. Bounce the vehicle up and down a few times; if the vehicle bounces more that twice, the shocks could be defective and require replacement.

MacPherson Struts

REMOVAL & INSTALLATION

Sedan

1. Position a jack under the vehicle, then raise it only enough to contact the vehicle.
2. Open the trunk, then loosen, but do not remove, the three nuts retaining the shock absorber bracket to the car's body.

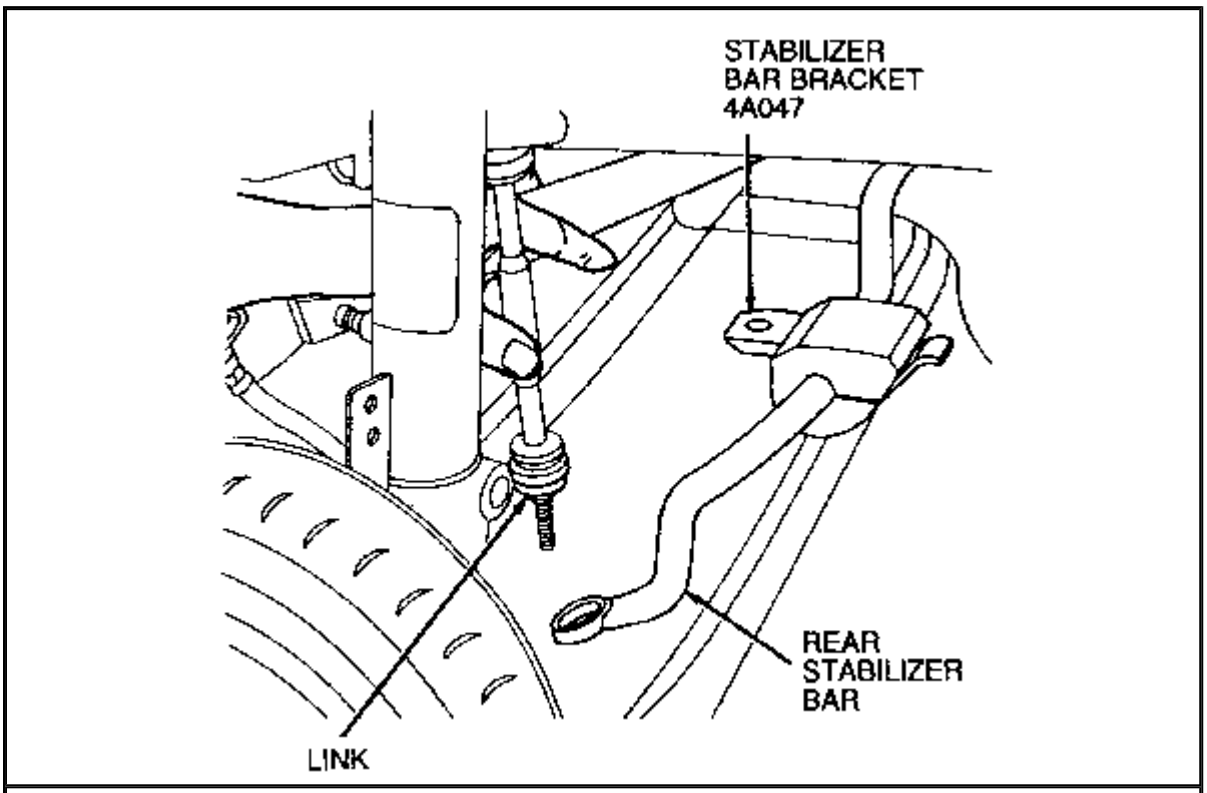
Open the trunk, then loosen, but do not remove, the three shock retaining nuts

3. Raise and safely support the vehicle. Remove the wheel and tire assembly.

Do not raise or support the vehicle using the tensionstruts.

4. Remove the bolt retaining the brake differential control valve/brake load sensor proportioning valve to the control arm. Using a wire, secure the control arm to the body to ensure proper support, leaving at least 6 in. (152mm) clearance to assist in the strut removal.
5. Remove the brake hose-to-strut bracket clip, then carefully move the hose aside.
6. If equipped, remove the stabilizer bar U-bracket from the vehicle.

7. **If equipped, remove the stabilizer bar-to-stabilizer link nut, washer and insulator, then separate the stabilizer bar from the link.**



If equipped, remove the stabilizer bar-to-stabilizer link nut, washer and insulator, then separate the stabilizer bar from the link

Click to enlarge

8. **Remove the nut, washer and rear strut body end-bushing holding the tension strut and the bushing to the rear wheel spindle. Move the spindle rearward enough to separate it from the tension strut.**

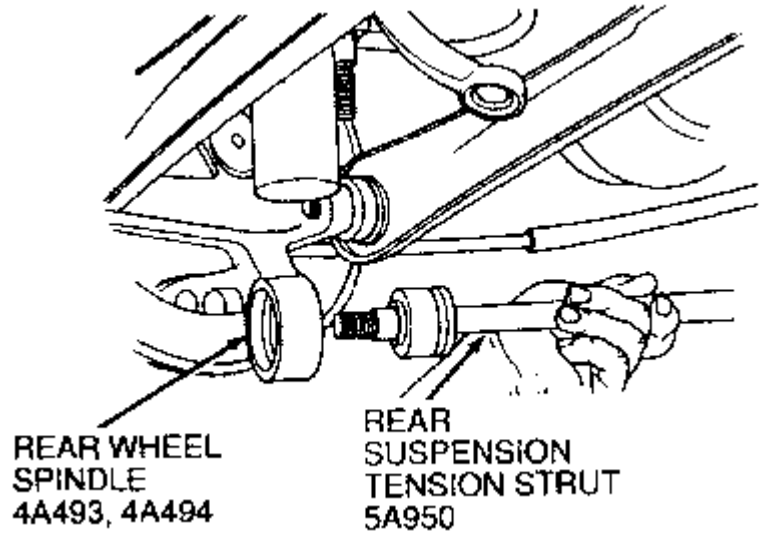
When removing the strut, be sure the rear brake flex hoseis not stretched or the steel brake tube is not bent.

9. **Remove the shock strut-to-spindle pinch bolt. If necessary, use a medium prybar, slightly spread the strut-to-spindle pinch joint to remove the strut. Discard the bolt and replace it during installation.**
10. **Lower the jackstand, then separate the shock strut from the spindle.**
11. **Remove the nut, washer and lower suspension arm stabilizer bar insulator attaching the link to the rear shock absorber, then remove the stabilizer bar link.**
12. **From inside the trunk, remove and discard the three upper mount-to-body nuts. Be careful that the shock absorber does not drop when removing the three nuts, then remove the shock absorber from the vehicle.**

To install:

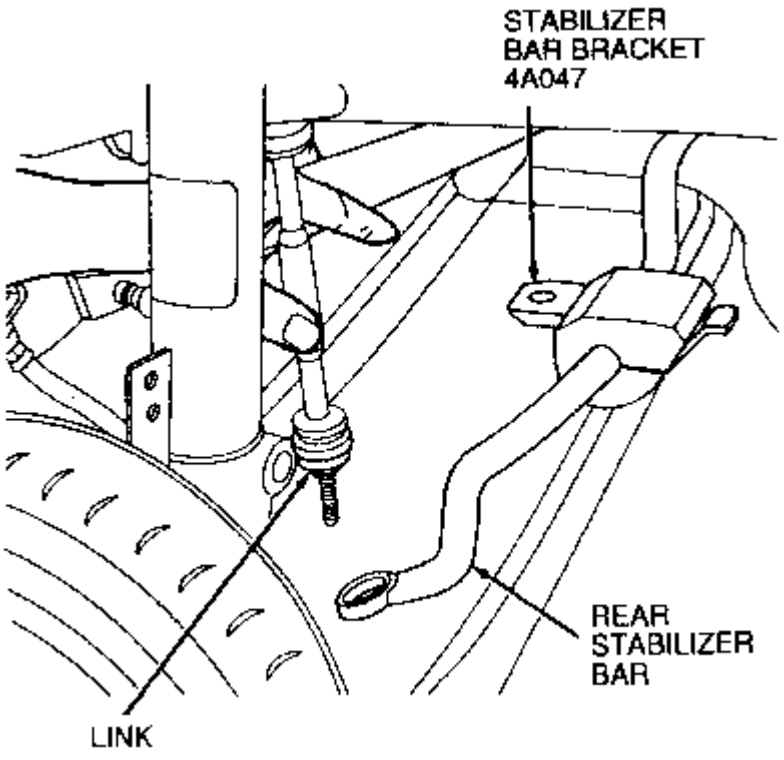
13. **Position the stabilizer bar link in the strut bracket. Install the insulator, washer and nut, then tighten to 5-7 ft. lbs. (7-9.5 Nm).**
14. **Insert the three upper mount studs into the strut tower in the apron, then hand-start three new nuts. Do not tighten the nuts at this time.**

15. **Partially raise the vehicle.**
16. **Install the strut into the spindle pinch joint. Install a new pinch bolt into the spindle and through the strut bracket. Tighten the bolt to 50-68 ft. lbs. (68-92 Nm).**
17. **Move the spindle rearward, then install the tension strut and bushing into the spindle. Install the insulator, washer and nut on the tension strut. Tighten the nut to 35-46 ft. lbs. (47-63 Nm).**



Move the spindle rearward, then install the tension strut and bushing into the spindle. Install the insulator, washer and nut on the tension strut

18. **Position the link into the stabilizer bar. Install the insulator, washer and nut on the link. Tighten to 5-7 ft. lbs. (7-9.5 Nm).**



Position the link into the stabilizer bar, then install the insulator, washer and nut on the link

Click to enlarge

19. **Position the stabilizer bar U-bracket on the body. Install the bolt, then tighten to 25-33 ft. lbs. (34-46 Nm).**
20. **Install the brake hose to the strut bracket.**
21. **Install the brake control differential valve/brake load sensor proportioning valve on the control arm, then remove the retaining wire.**
22. **In the trunk, tighten the top mount-to-body nuts to 19-25 ft. lbs. (25-34 Nm).**
23. **Install the wheel and tire assembly, then carefully lower the vehicle.**

OVERHAUL

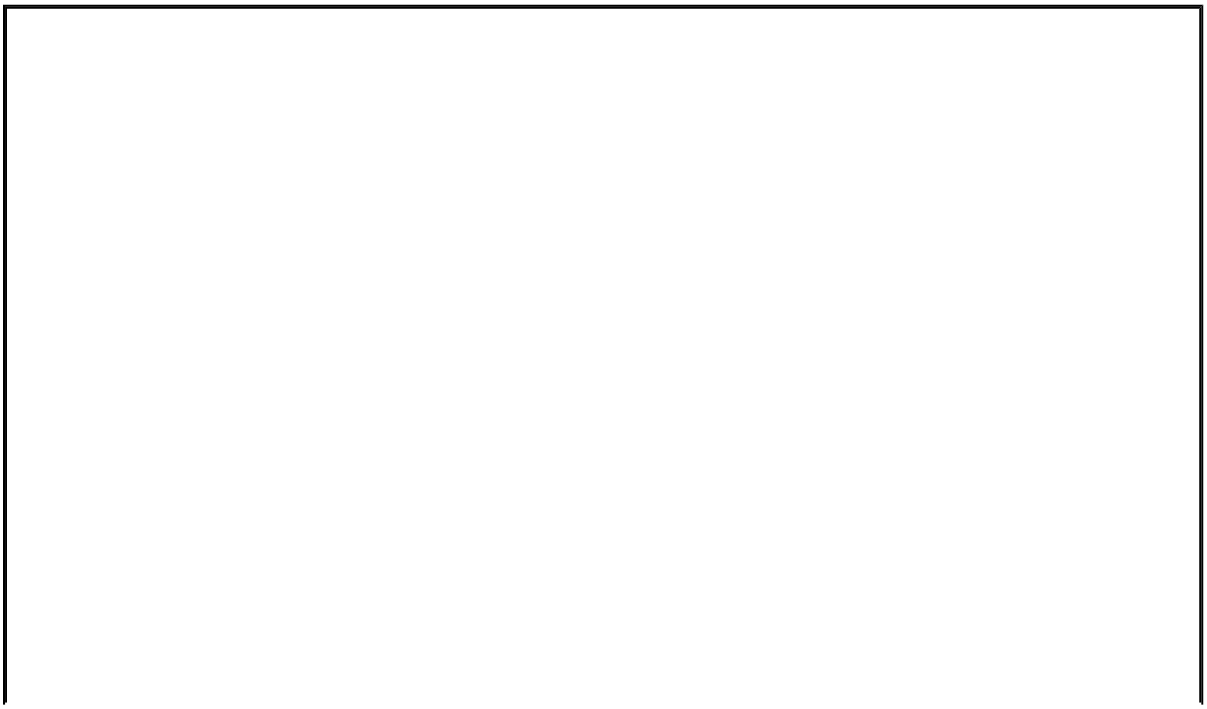
The following procedure is performed with the strut assembly removed from the car. A MacPherson Strut compression tool is required for the disassembly of the strut; use a cage type tool such as the No. D85P-7181-A, Rotunda Spring Compressor 086-0029B, or equivalent is required.

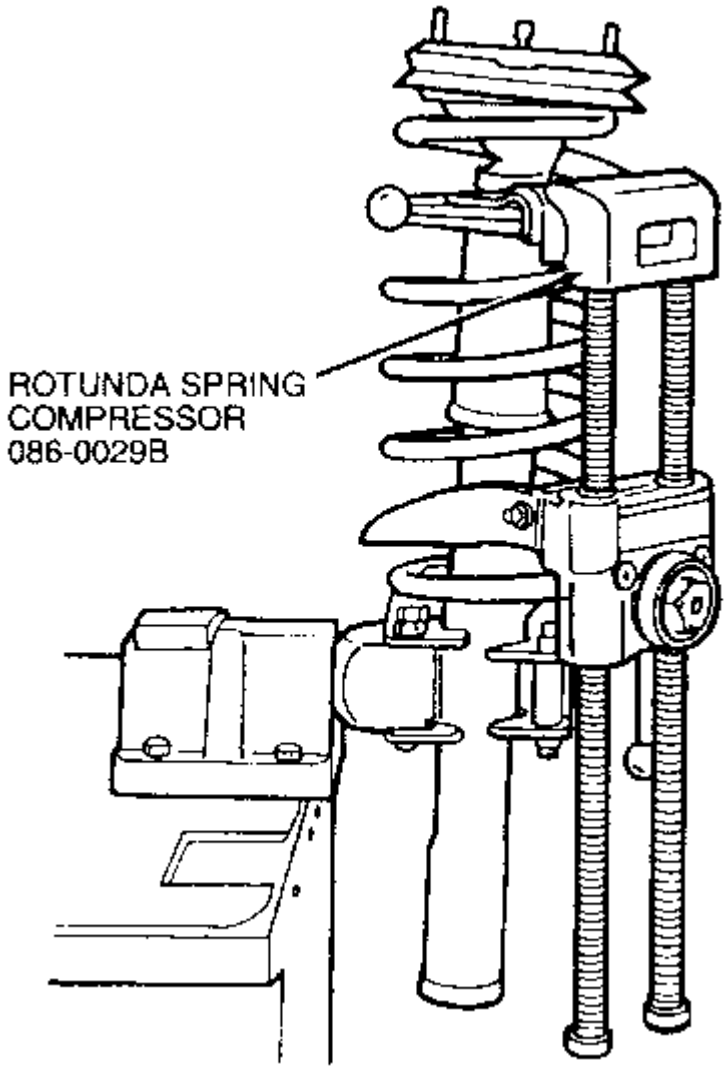
CAUTION

NEVER attempt to disassemble the spring or top mount without firstcompressing the spring using the strut compressor tool No. D85P-7178-A orequivalent. If a strut spring compressor is not used, the assembly could flyapart by the force of the spring tension, resulting in serious injury or death.

Before compressing the spring, mark the location of the insulator to thetop mount using a grease pencil.

1. **Remove the rear shock and spring assembly, as outlined in the procedure located earlier in this section.**
2. **Compress the spring with the coil spring compressor D85P-7178-A, 086-0029B or equivalent.**



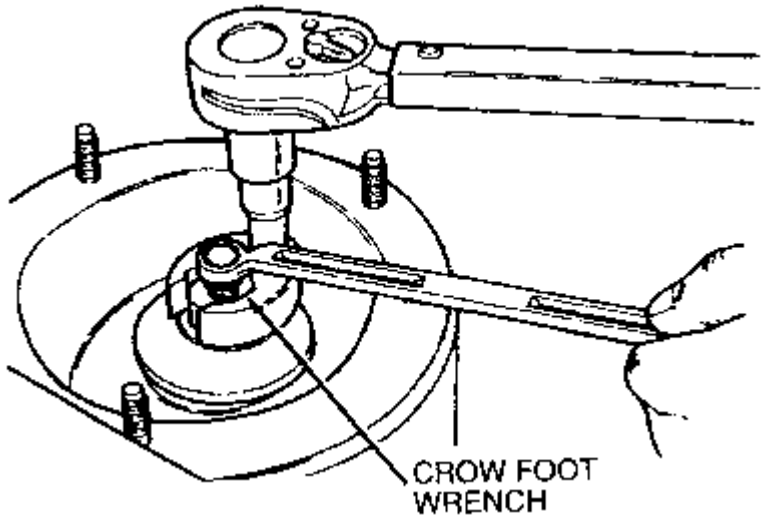


Compressing the spring using the appropriate tool

Click to enlarge

3. **Place a 10mm box wrench on top of the shock strut shaft, and hold while removing the top shaft mounting nut with a 21mm 6-point crow's foot wrench and ratchet.**

It is important that the mounting nut be turned and therod held still to prevent fracture of the rod at the base of the hex.



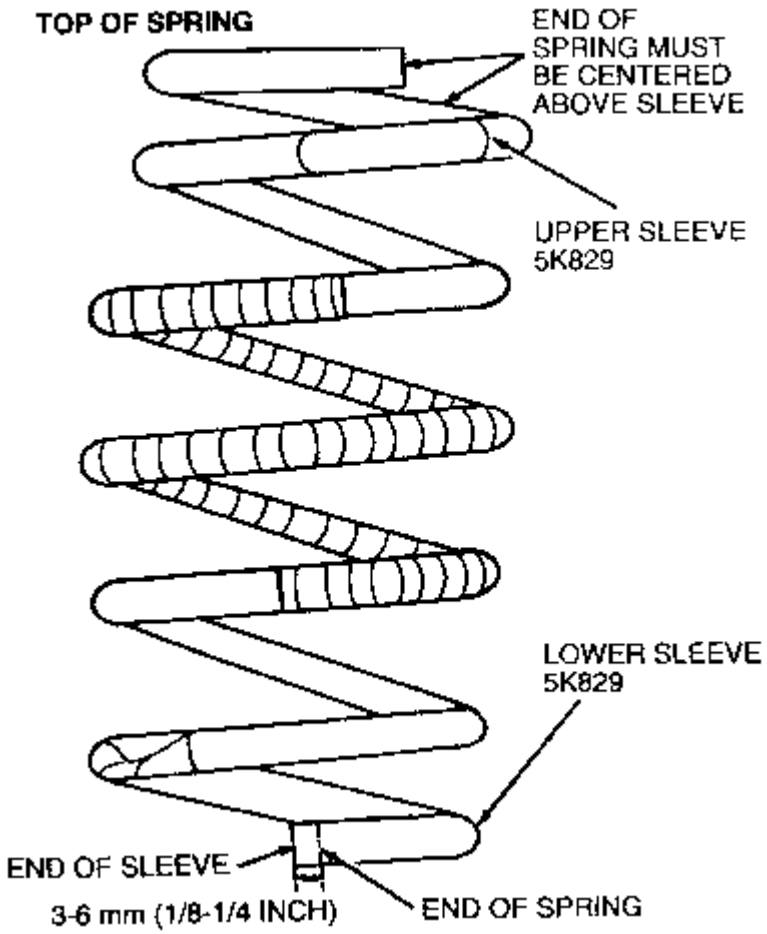
Place a 10mm box wrench on top of the shock strut shaft, and hold while removing the top shaft mounting nut with a 21mm 6-point crow's foot wrench and ratchet

4. **Loosen the spring compressor tool, then remove the top mounting bracket assembly, bearing plate assembly and spring.**

To assemble:

Ensure that the correct assembly sequence and proper positioning of thebearing and seat assembly are followed. The bearing and seat assembly ispress-fit onto the upper mount. The mount washers must be installed with theproper orientation.

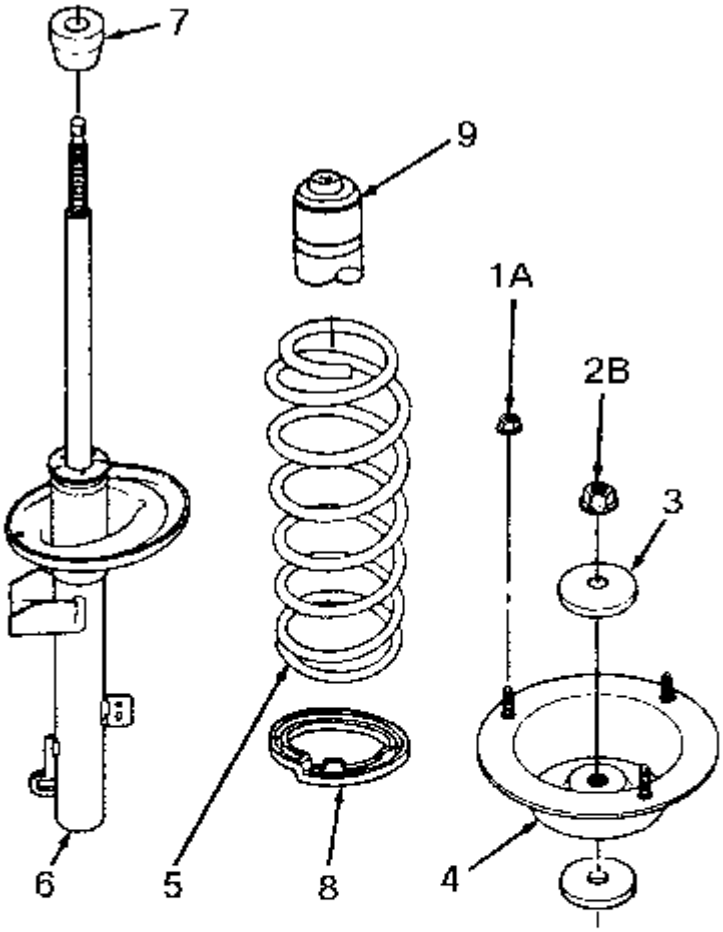
5. **Inspect the spring to ensure that the dampers, sleeves and clips are properly positioned.**



Before installation, check the spring to make sure the dampers, sleeves and clips are positioned correctly

Click to enlarge

6. **Install the spring compressor tool No. D85P-7178-A, 086-0029B or equivalent.**
7. **Install the spring, insulator, bottom washer (if equipped), top mount bracket assembly, upper washer and nut.**

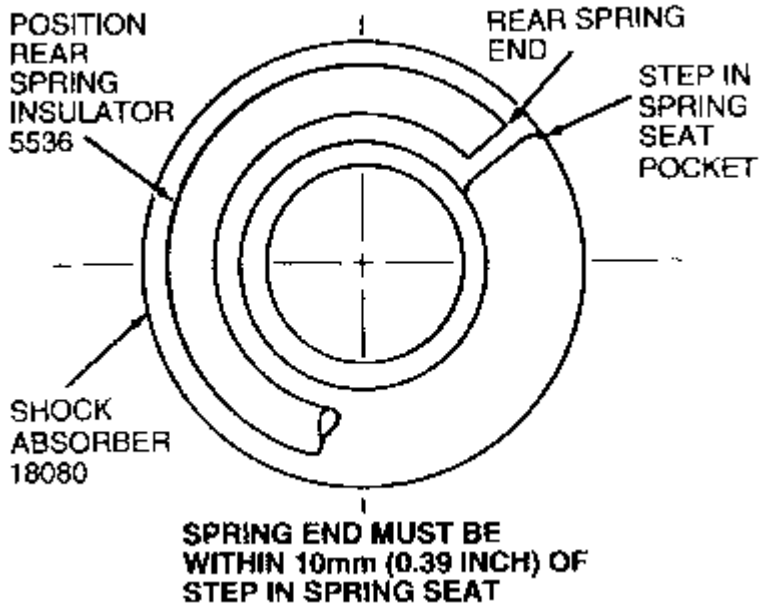


1 Nut (3 req'd)
2 Nut
3 Washer (6 req'd)
4 Rear shock absorber bracket
5 Rear spring
6 Rear shock absorber
7 Rear shock absorber jounce bumper
8 Rear spring center mounting insulator
9 Dust boot
A Tighten to 25-34 Nm (19-25 lb.ft.)
B Tighten to 53-72 Nm (40-53 lb.ft.)

Exploded view of the rear shock and spring assembly

Click to enlarge

8. **Compress the spring with the coil spring compressor tool. Be certain that the spring is properly located in the upper and lower spring seats and that the mount washers are oriented correctly.**



Make sure the spring is correctly located in the upper mount and lower spring seat, and that the mount washers are properly positioned

Click to enlarge

9. Place a 10mm box-end wrench on the top of the shock strut shaft and hold while tightening the top shaft mounting nut with a 21mm 6-point crow's foot wrench and a ratchet. Tighten the nut to 40-53 ft. lbs. (53-72 Nm).
10. The strut assembly may now be installed in the vehicle.

Control Arms

REMOVAL & INSTALLATION

Sedan

1. Raise and safely support the vehicle.

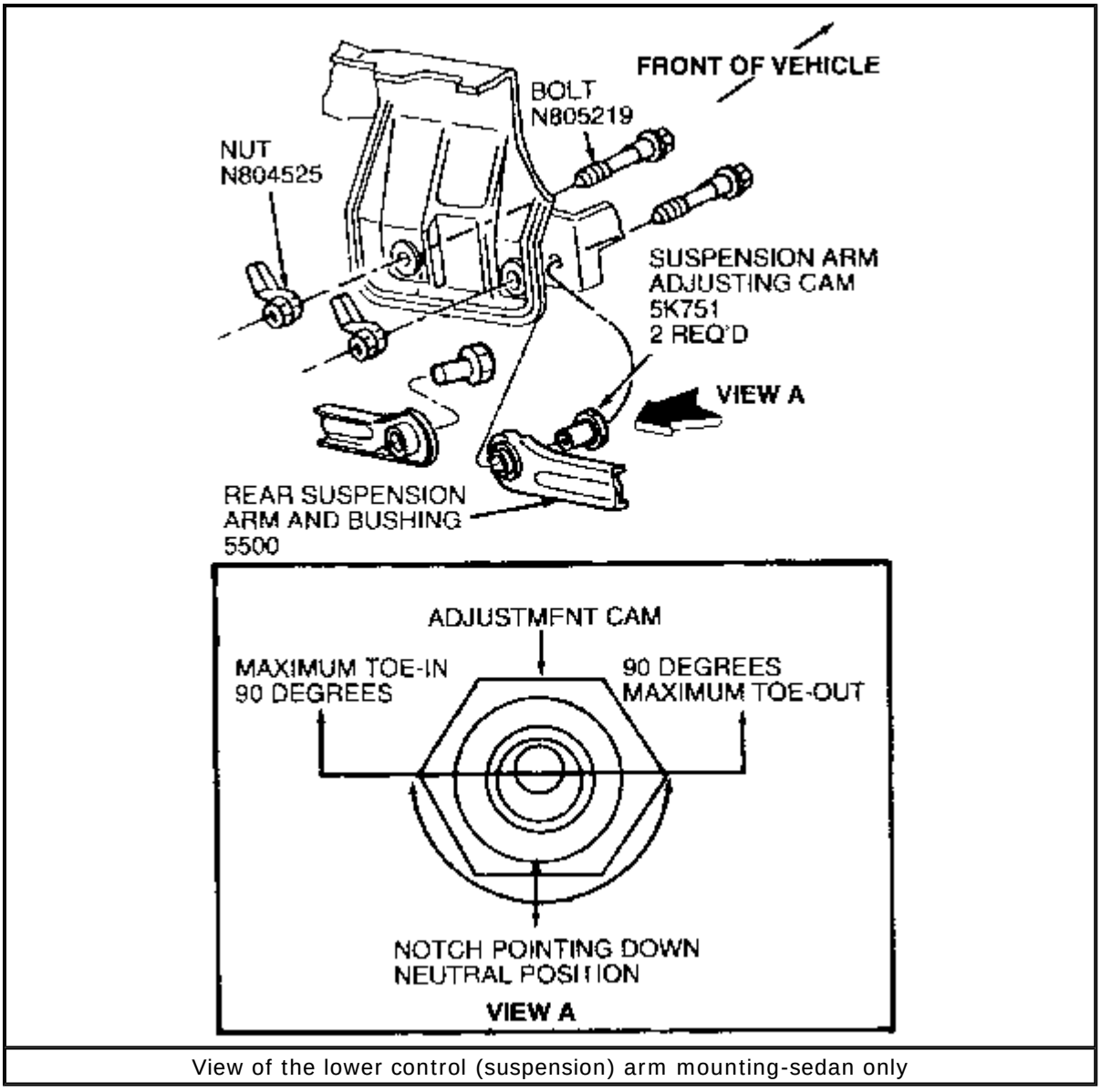
Do not raise the vehicle by the tension strut.

2. For vehicles through 1993, disconnect the brake load sensor proportioning valve (s) from the left side front control arm. For 1994-95 vehicles, disconnect the brake load sensor proportioning valve(s) from the rear arm and bushing.
3. Disconnect the parking brake cable from the front control arms on vehicles through 1993. For 1994-95 vehicles, disconnect the parking brake cable from the rear arm and bushings.
4. Remove and discard the arm-to-spindle bolt, washer and nut.
5. Remove and discard the arm-to-body bolt and nut.
6. Remove the lower control arm from the vehicle.

To install:

When installing new control arms, the offset on all arms must face up. The arms are stamped "bottom" on the lower edge. The flange edge of

the right side rear arm stamping must face the front of the vehicle. The other 3 must face the rear of the vehicle. The rear control arms have two adjustment cams that fit inside the bushings at the arm-to-body attachment. The cam is installed from the rear on the left arm and from the front on the right arm.



View of the lower control (suspension) arm mounting-sedan only

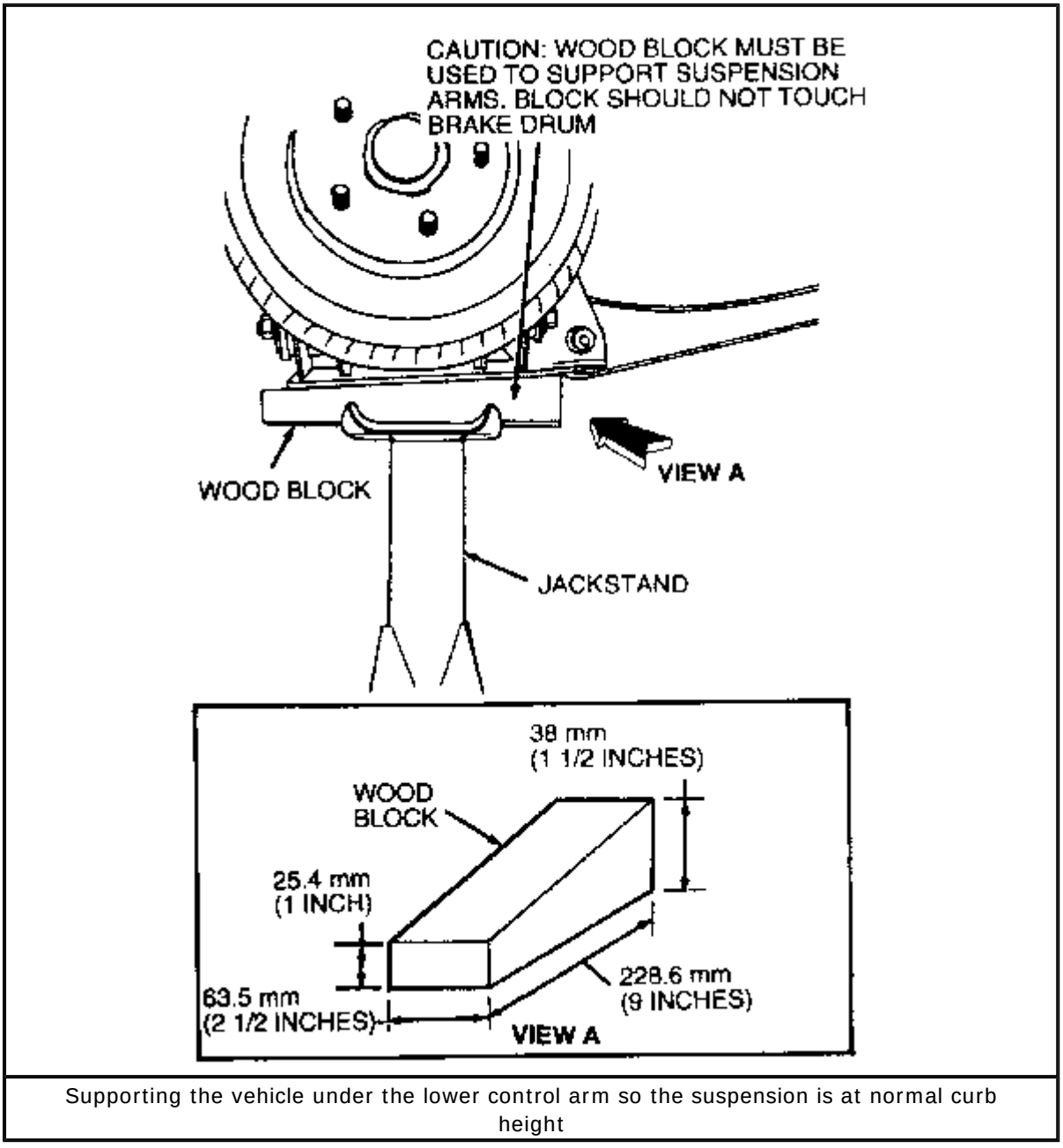
Click to enlarge

7. **Position the arm and cam where required, at the center of the vehicle. Insert a new bolt and nut, but do not tighten at this time.**
8. **Move the arm end up to the spindle, then insert a new bolt, washer and nut. Tighten the nut to 44-59 ft. lbs. (59-81 Nm).**
9. **Tighten the arm-to-body nut to 50-68 ft. lbs. (68-92 Nm).**
10. **Attach the parking brake cable to the front arms or rear arm, as applicable.**
11. **Connect the brake load sensor proportioning valve to the left side front arm or rear arm as applicable.**
12. **Carefully lower the vehicle, then have the alignment checked by a reputable repair shop.**

Wagon

UPPER ARM

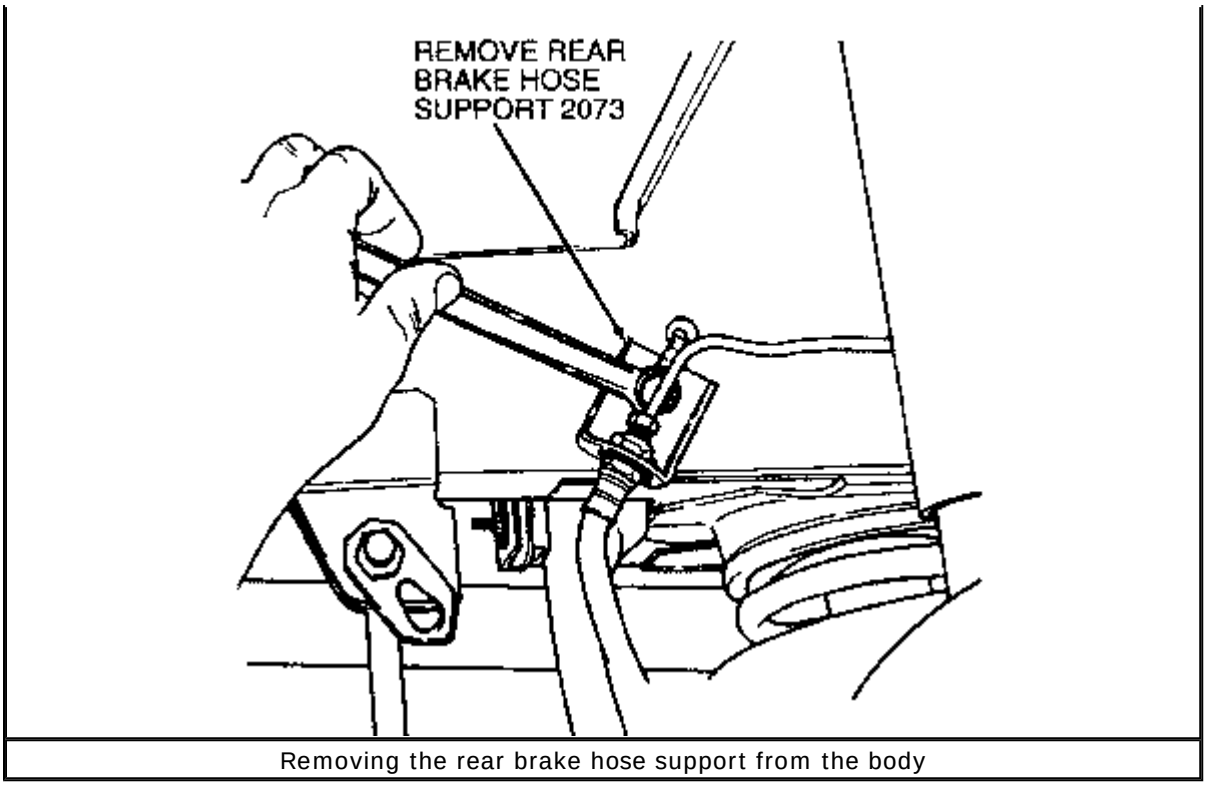
1. **Raise and safely support the vehicle, then place a jackstand and wood block under the rear lower control arm to support it so the suspension is at normal curb height, as shown in the accompanying figure.**



Supporting the vehicle under the lower control arm so the suspension is at normal curb height

Click to enlarge

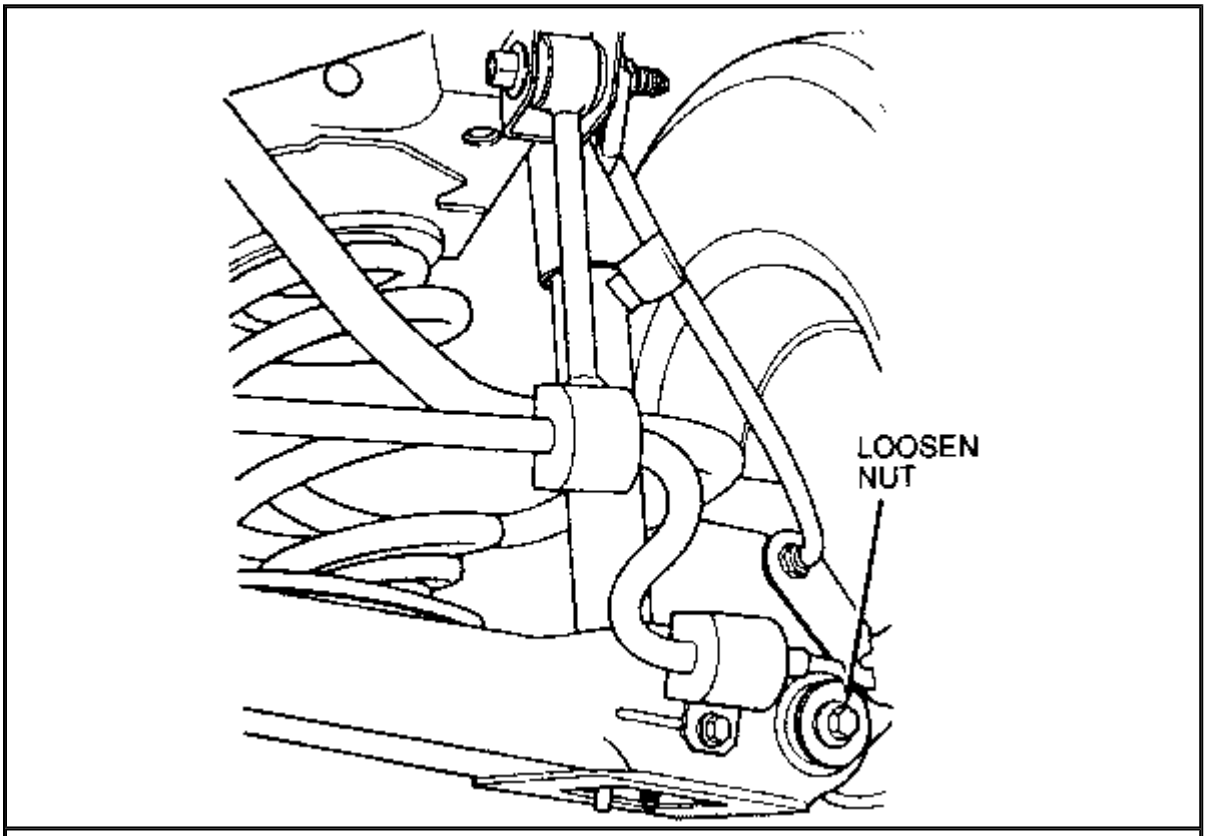
2. **Remove the wheel and tire assembly.**
3. **Remove the brake line flexible hose bracket from the body.**



Removing the rear brake hose support from the body

Click to enlarge

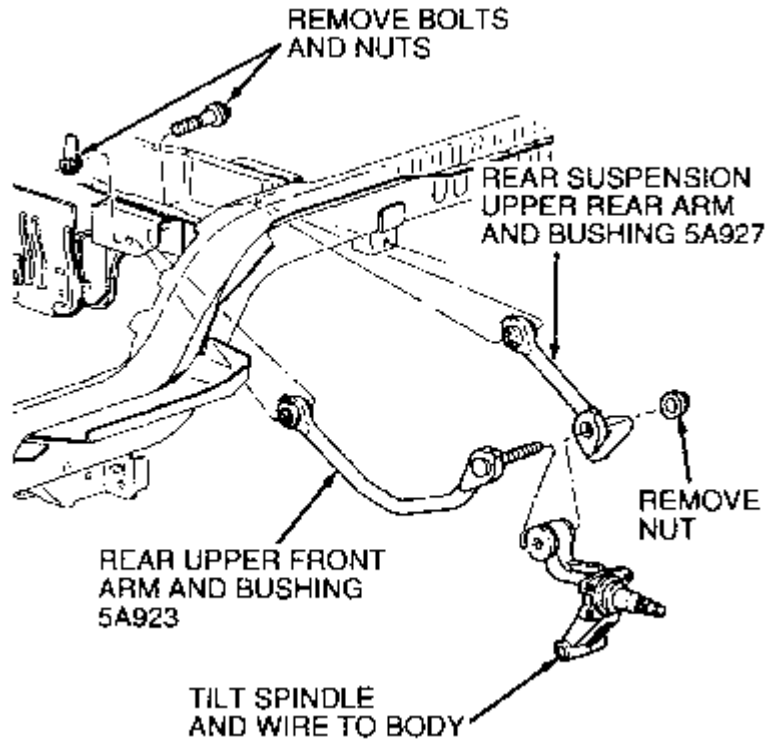
4. **Loosen, but do not remove, the nut attaching the rear wheel spindle to the front and rear upper control arms.**
5. **Loosen, but do not remove, the nut attaching the rear wheel spindle to the rear lower control arm.**



Loosen, but do not remove the nut attaching the rear wheel spindle to the rear lower

control arm

6. **Remove and discard the nuts and bolts attaching the front and rear upper suspension arms to the body brackets. Make sure the spindle does not fall outward.**
7. **Carefully tilt the top of the spindle outward, letting it pivot on the lower suspension arm attaching bolt until the ends of the upper suspension arms are clear of the body bracket. Support the spindle with wire in this position.**
8. **Remove and discard the nut attaching the rear suspension front and rear upper suspension arms to the spindle, then remove the arm from the vehicle.**

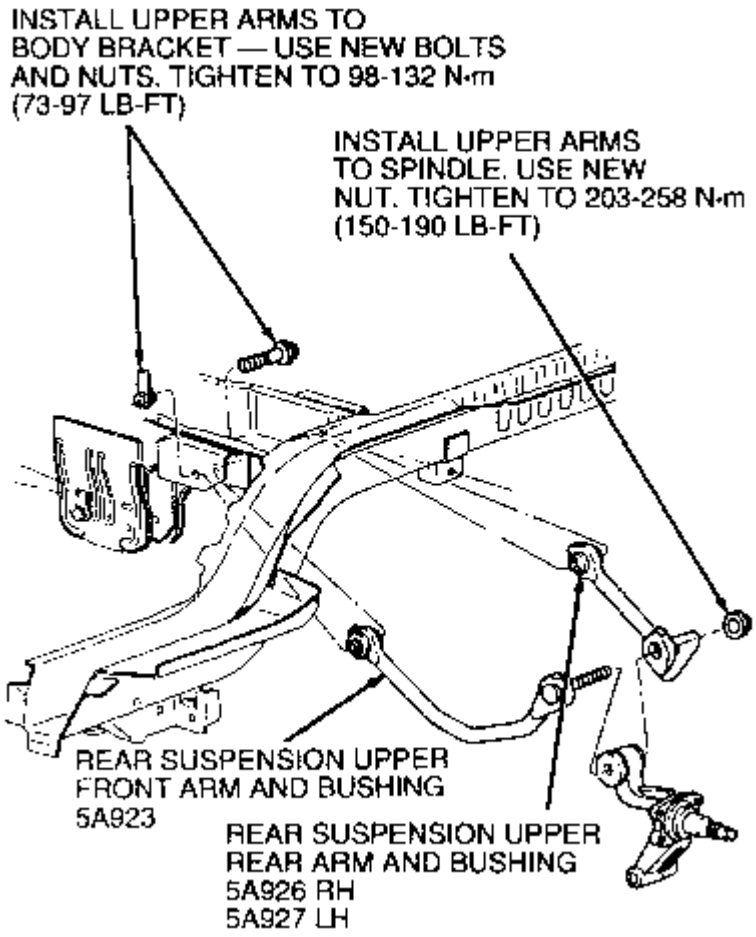


Remove and discard the nut attaching the front and rear upper suspension arms to the spindle, then remove the arm from the vehicle

Click to enlarge

To install:

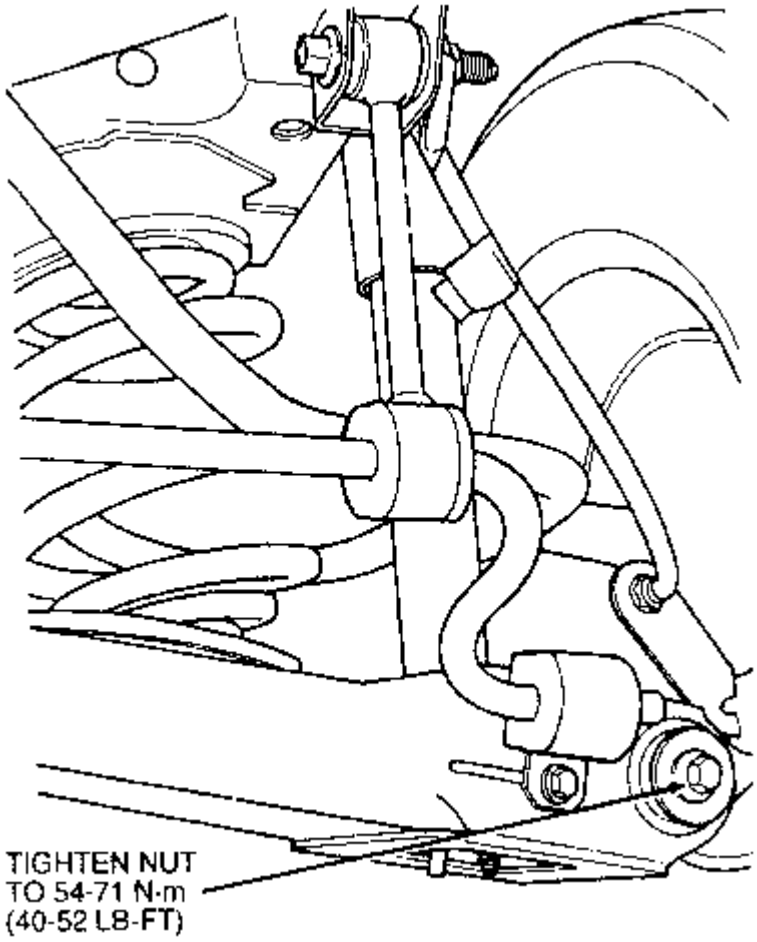
9. **Install the rear suspension front and rear upper control arms on the spindle, then install a new nut, but do not tighten the nut yet.**



Installing the rear upper control arm-station wagon only

Click to enlarge

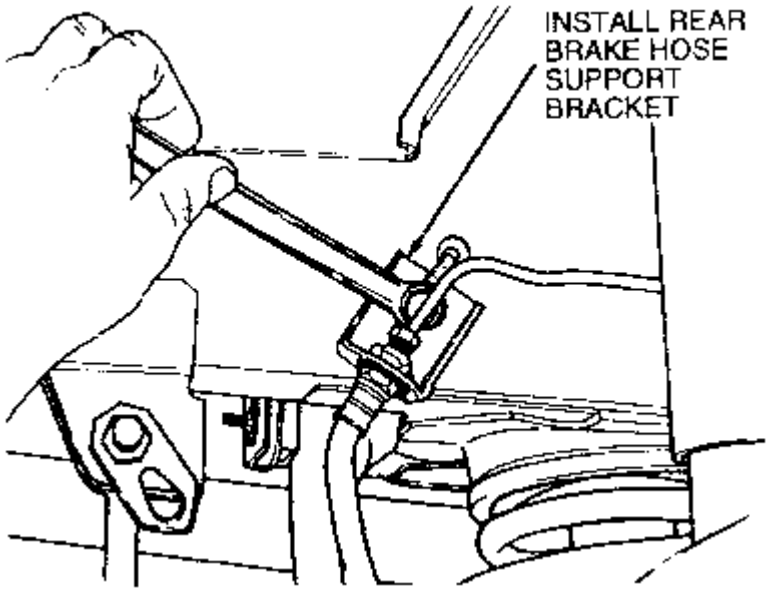
10. **Position the upper control arm ends to the body bracket, then install new nuts and bolts. Tighten to 73-97 ft. lbs. (98-132 Nm). Remove the wire from the rear wheel spindle.**
11. **Tighten the nut attaching the upper suspension arms to the spindle to 150-190 ft. lbs. (203-258 Nm).**
12. **Tighten the nut attaching the lower suspension arm to the spindle to 40-52 ft. lbs. (54-71 Nm).**



Tighten the nut attaching the lower suspension arm to the spindle to 40-52 ft. lbs. (54-71 Nm)

Click to enlarge

13. **Install the rear brake hose support bracket to the body, then tighten to 8-12 ft. lbs. (11-16 Nm).**



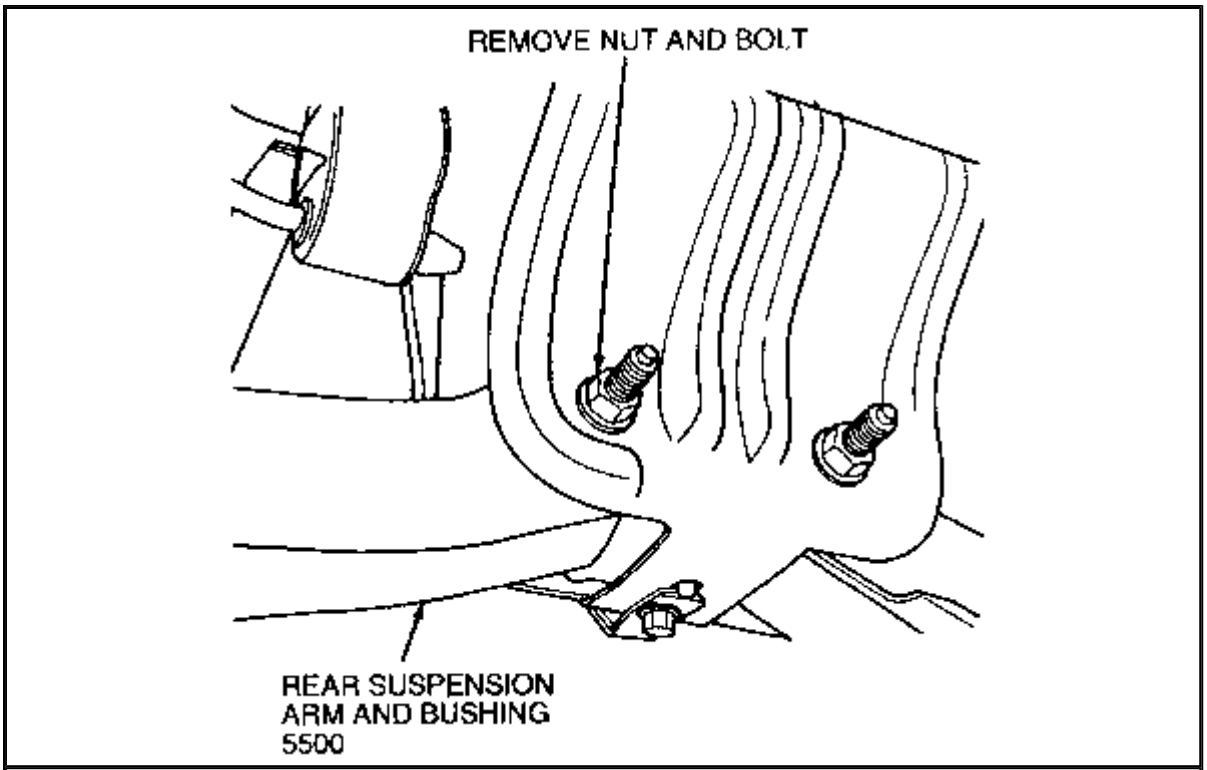
Install the rear brake hose support bracket to the body, then tighten to 8-12 ft. lbs. (11-16 Nm)

Click to enlarge

14. **Install the wheel and tire assembly, remove the jackstand and wood block, then lower the vehicle.**
15. **Check the rear wheel alignment.**

LOWER ARM

1. **Raise and safely support the vehicle, on the lifting pads on the underbody forward of the tension strut body bracket.**
2. **Remove the wheel and tire assembly.**
3. **Remove the rear spring assembly. For details, please refer to the procedure located earlier in this section.**
4. **Remove and discard the bolt and nut retaining the lower rear control arm and bushing to the center body bracket, then remove the lower control arm and bushing assembly.**



Remove and discard the nut and bolt securing the lower rear control arm and bushing to the center body bracket, then remove the lower control arm and bushing assembly

Click to enlarge

To install:

5. **Position the rear lower control arm and bushing to the center body bracket, then install a new bolt and nut. Install the bolt with the bolt head toward the front of the vehicle, but do not tighten the bolt at this time.**
6. **Install the rear spring assembly. For details, please refer to the procedure located earlier in this section.**
7. **Support the control arm and bushing in the normal position when the vehicle is at curb height. Tighten the nut securing the arm to the body bracket to 40-52 ft. lbs. (54-71 Nm).**

After rear control arm and bushing replacement, it is necessary to have the vehicle's rear alignment checked and/or adjusted by a reputable repair shop.

8. Tighten the nut securing the lower control arm to the wheel spindle to 40-52 ft. lbs. (54-71 Nm).
9. Remove the jackstands, then carefully lower the vehicle.

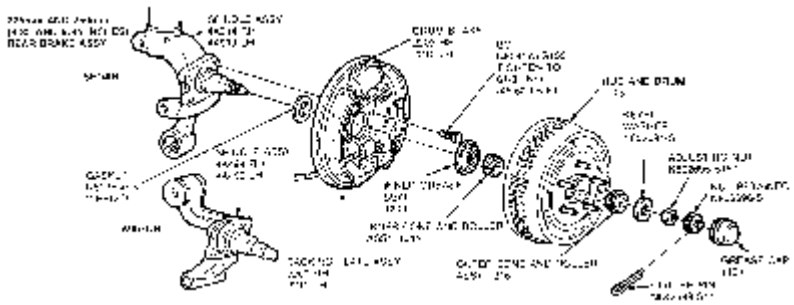
Rear Wheel Bearings

REPLACEMENT

Drum Brakes

1986-89 VEHICLES

1. Raise the vehicle and support it safely. Remove the wheel from the hub and drum.



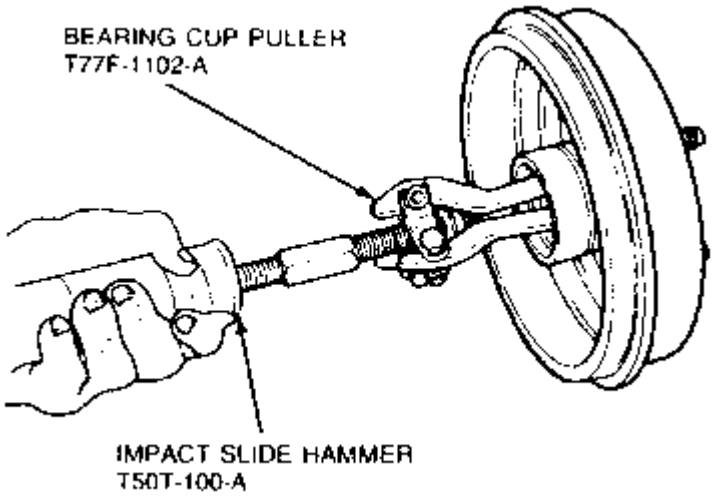
Rear wheel hub and bearing assembly-1986-89 vehicles with drum brakes

Click to enlarge

2. Remove the grease cap from the hub, being careful not to damage the cap. Remove the cotter pin, nut retainer, adjusting nut and keyed flat washer from the spindle. Discard the cotter pin.

Styled steel wheels and aluminum wheels require theremoval of the wheel and tire assembly to remove the dust cover.

3. Being careful not to drop the outer bearing assembly, pull the hub and drum assembly off of the spindle. Remove the outer bearing assembly.
4. Using Seal Remover tool 1175-AC or equivalent, remove and discard the grease seal. Remove the inner bearing assembly from the hub.
5. Wipe all lubricant from the spindle and inside of the hub. Cover the spindle with a clean cloth and vacuum all loose dust and dirt from the brake assembly. Carefully remove the cloth to prevent dirt from falling on the spindle.
6. Clean both bearing assemblies and cups using a suitable solvent. Inspect the bearing assemblies and cups for excessive wear, scratches, pits or other damage, then replace as necessary.
7. If the cups are to be replaced, remove them with Impact Slide Hammer T50T-100-A and Bearing Cup Puller T77F-1102-A or equivalents.



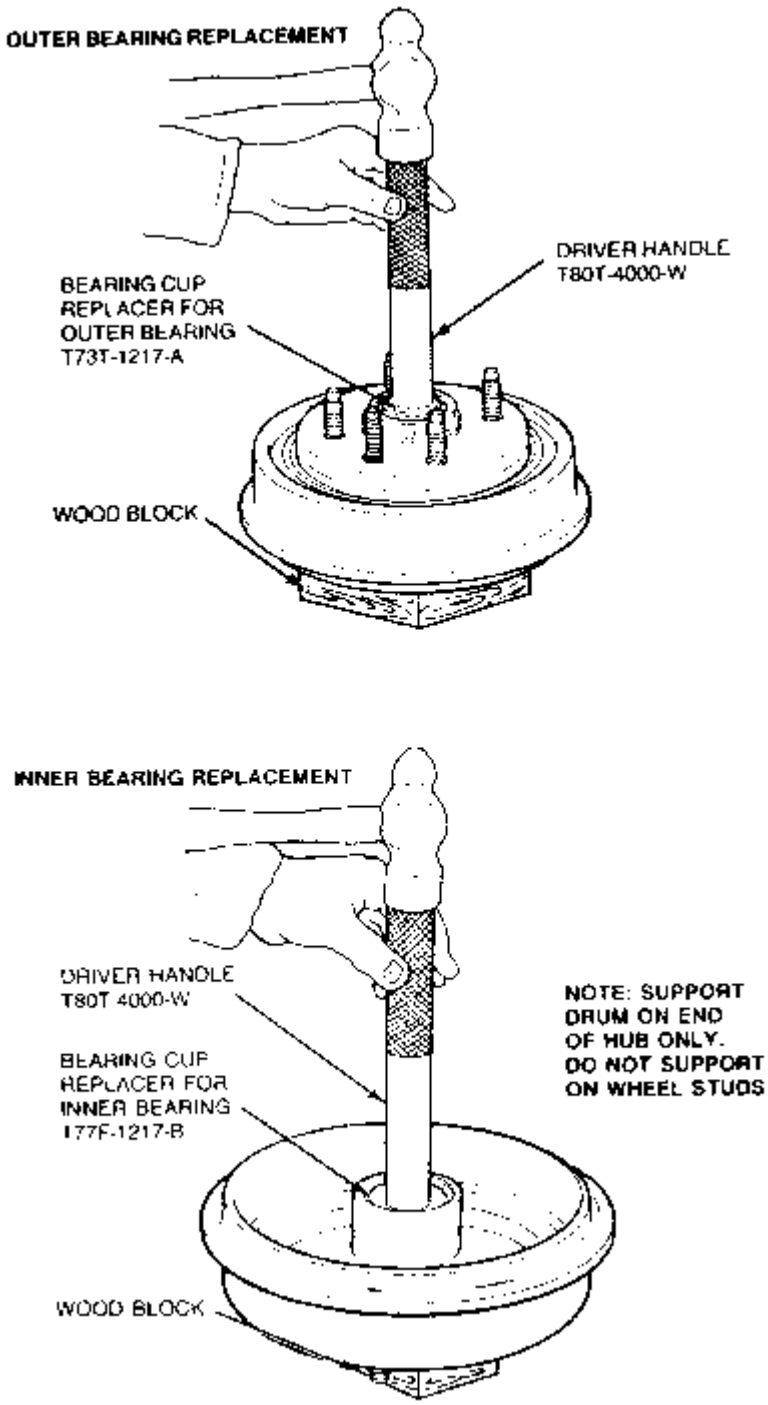
Removing the cups, if necessary, with the correct tools

Click to enlarge

To install:

8. **If the inner and outer bearing cups were removed, install the replacement cups using Driver Handle T80T-4000-W and Bearing Cup Replacers T73T-1217-A and T77F-1217-A or equivalents. Support the drum hub on a block of wood to prevent damage. Make sure the cups are properly seated in the hub.**

Do NOT use the cone and roller assembly to install thecups. This will result in damage to the bearing cup and the cone and roller assembly.



Installing the inner and outer bearing cups-1986-89 vehicles equipped with drum brakes

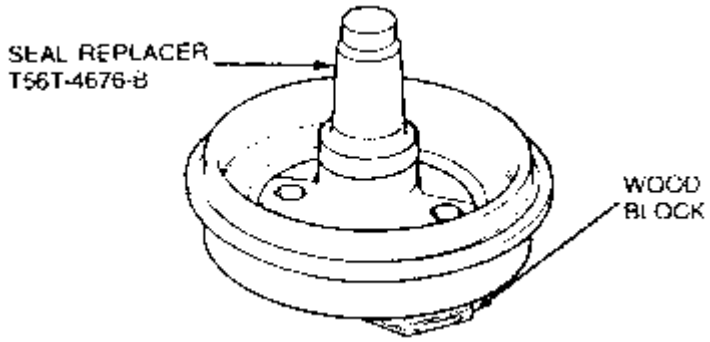
Click to enlarge

9. **Make sure all of the spindle and bearing surfaces are clean.**

Allow the cleaning solvent to dry before repacking thebearings. Do NOT spin the bearings dry with compressed air!

10. **Using a bearing packer, pack the bearing assemblies with Long-Life Lubricant C1AZ-19590-BA or equivalent suitable wheel bearing grease. If a packer is not available, work in as much grease as possible between the rollers and cages. Grease the cup surfaces.**
11. **Position the inner bearing cone and roller assembly in the inner cup. Apply a light**

film of grease to the lips of a new grease seal and install the seal with Rear Hub Seal Replacer T56T-4676-B or equivalent. Make sure the retainer flange is seated all around.



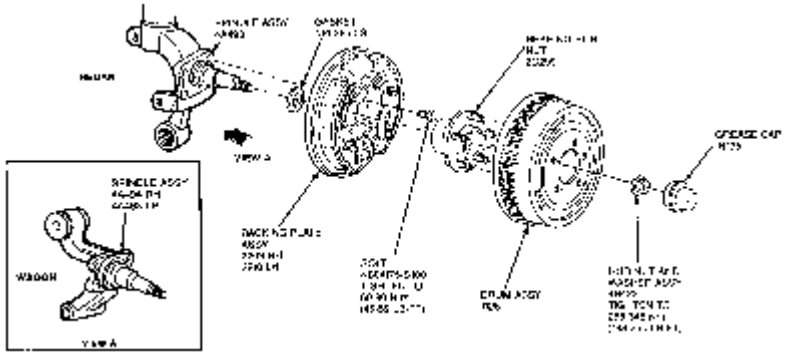
Installing the grease seal in the rear hub-1986-89 vehicles equipped with drum brakes

Click to enlarge

12. **Apply a light film of grease on the spindle shaft bearing surfaces. Install the hub and drum assembly on the spindle. Keep the hub centered on the spindle to prevent damage to the grease seal and spindle threads.**
13. **Install the outer bearing assembly and the keyed flat washer on the spindle. Install the adjusting nut, then adjust the wheel bearings as outlined later in this section.**
14. **Install a new cotter pin, then install the grease cap. Replace with a new grease cap if there is any corrosion on the inner surfaces of the cap.**
15. **Place the wheel and tire assembly on the drum. Install the lug nuts, then hand-tighten alternately to seal the wheel evenly against the hub and drum.**
16. **Carefully lower the vehicle, then tighten the lug nuts to 85-105 ft. lbs. (115-142 Nm) using a torque wrench.**

1990-95 VEHICLES

1. **Raise and safely support the vehicle.**
2. **Remove the wheel and tire assembly.**
3. **Remove the two pushnuts retaining the drum to the hub, then remove the drum.**
4. **Remove the rear hub cap grease seal from the hub assembly, then discard it.**
5. **Remove and discard the hub retainer, then remove the bearing and hub assembly from the spindle.**



Rear wheel hub and bearing assembly-1990-95 vehicles equipped with drum brakes

Click to enlarge

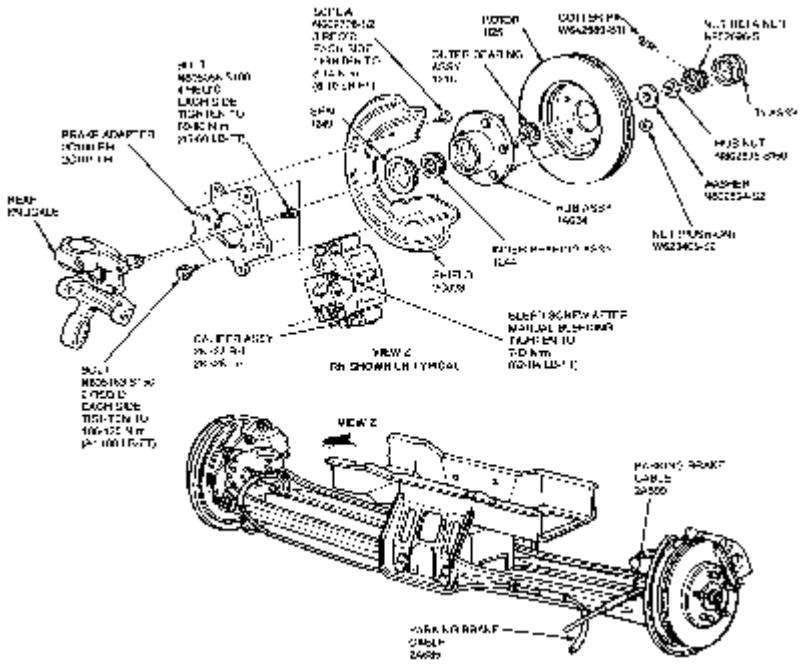
To install:

6. Position the hub on the spindle.
7. Install a new wheel hub retainer, then tighten to 188-254 ft. lbs. (255-345 Nm).
8. Install the new hub cap grease seal using Shaft Protector for Coil Removal T89P-19623-FH. Tap on the tool to make sure the grease cap is fully seated.
9. Install the brake drum on the hub, then install the two pushnuts that retain the brake drum.
10. Install the wheel and tire assembly, then carefully lower the vehicle.

Disc Brakes

1986-89 VEHICLES

1. Raise and safely support the vehicle. Remove the tire and wheel assembly from the hub.
2. Remove the brake caliper by removing the two bolts that attach the caliper support to the cast iron brake adapter. Do not remove the caliper pins from the caliper assembly. Lift the caliper off of the rotor, then support it with a length of wire. Do not allow the caliper assembly to hang from the brake hose.
3. Remove the rotor from the hub by pulling it off the hub bolts. If the rotor is difficult to remove, strike the rotor sharply between the studs with a rubber or plastic hammer.
4. Remove the grease cap from the hub. Remove the cotter pin, nut retainer, adjusting nut and keyed flat washer from the spindle. Discard the cotter pin.
5. Pull the hub assembly off of the spindle. Remove the outer bearing assembly.
6. Using Seal Remover Tool 1175-AC or equivalent, remove and discard the grease seal. Remove the inner bearing assembly from the hub.
7. Wipe all of the lubricant from the spindle and inside of the hub. Cover the spindle with a clean cloth and vacuum all of the loose dust and dirt from the brake assembly. Carefully remove the cloth to prevent dirt from falling on the spindle.
8. Clean both bearing assemblies and cups using a suitable solvent. Inspect the bearing assemblies and cups for excessive wear, scratches, pits or other damage and replace as necessary.
9. If the cups are being replaced, remove them with Impact Slide Hammer Tool T50T-100-A and Bearing Cup Puller Tool T77F-1102-A or equivalents.



Rear hub and bearing assembly-1986-89 vehicles with disc brakes

Click to enlarge

To install:

10. **If the inner and outer bearing cups were removed, install the replacement cups using Driver Handle Tool T80T-4000-W and Bearing Cup Replacer Tools T73F-1217-A and T77F-1217-B or equivalents. Support the hub on a block of wood to prevent damage. Make sure the cups are properly seated in the hub.**

Do not use the cone and roller assembly to install thecups. This will result in damage to the bearing cup as well as the cone androller assembly.

11. **Make sure all of the spindle and bearing surfaces are clean.**
12. **Pack the bearing assemblies with a suitable wheel bearing grease using a bearing packer. If a packer is not available, work in as much grease as possible between the rollers and the cages. Grease the cup surfaces.**

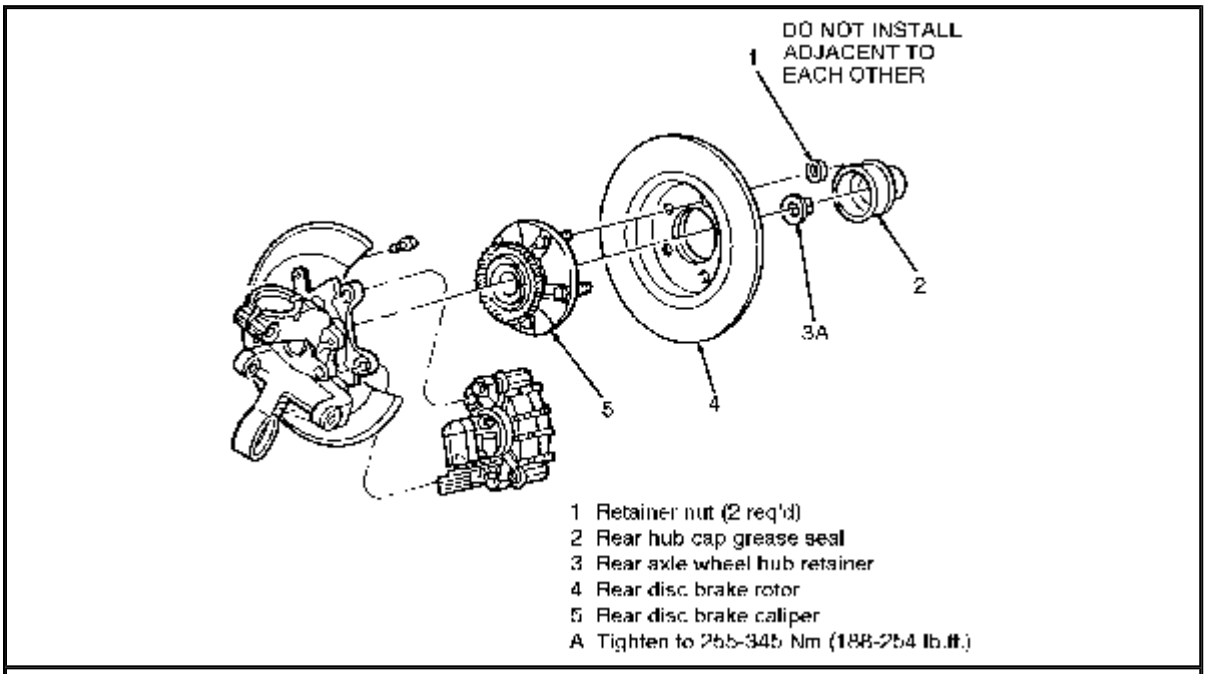
Allow all of the cleaning solvent to dry before repackingthe bearings. Do not spin-dry the bearings with air pressure.

13. **Place the inner bearing cone and roller assembly in the inner cup. Apply a light film of grease to the lips of a new grease seal and install the seal with Rear Hub Seal Replacer Tool T56T-4676-B or equivalent. Make sure the retainer flange is seated all around.**
14. **Apply a light film of grease on the spindle shaft bearing surfaces. Install the hub assembly on the spindle. Keep the hub centered on the spindle to prevent damage to the grease seal and spindle threads.**
15. **Install the outer bearing assembly and keyed flat washer on the spindle. Install the adjusting nut and adjust the wheel bearings. Install a new cotter pin and the grease cap.**
16. **Install the disc brake rotor to the hub assembly. Install the disc brake caliper over the rotor.**

17. **Install the wheel and tire assembly, then carefully lower the vehicle.**

1990-95 VEHICLES

1. **Raise and safely support the vehicle.**
2. **Remove the wheel and tire assembly.**
3. **Remove the caliper assembly from the brake adapter. Support the caliper assembly with a piece of wire.**
4. **Remove the push-on nuts that retain the rotor to the hub, then remove the rotor.**
5. **Remove the hub cap grease seal from the bearing and hub assembly, then discard the seal.**
6. **Remove the bearing and hub assembly retainer, then remove the bearing and hub assembly from the spindle.**



Rear hub and bearing assembly-1990-95 vehicles with disc brakes

Click to enlarge

To install:

7. **Position the hub on the wheel spindle.**
8. **Install a new wheel hub retainer, then tighten to 188-254 ft. lbs. (255-345 Nm).**
9. **Using Coil Remover T89P-19623-FH or equivalent, install a new grease seal. Tap on the tool until the grease seal is completely seated.**
10. **Install the rotor on the hub. Install the two retaining push-on nuts that hold the rotor on the hub.**
11. **Install the brake caliper to the brake adapter.**
12. **Install the wheel and tire assembly, then carefully lower the vehicle.**

ADJUSTMENT

1986-89 Vehicles

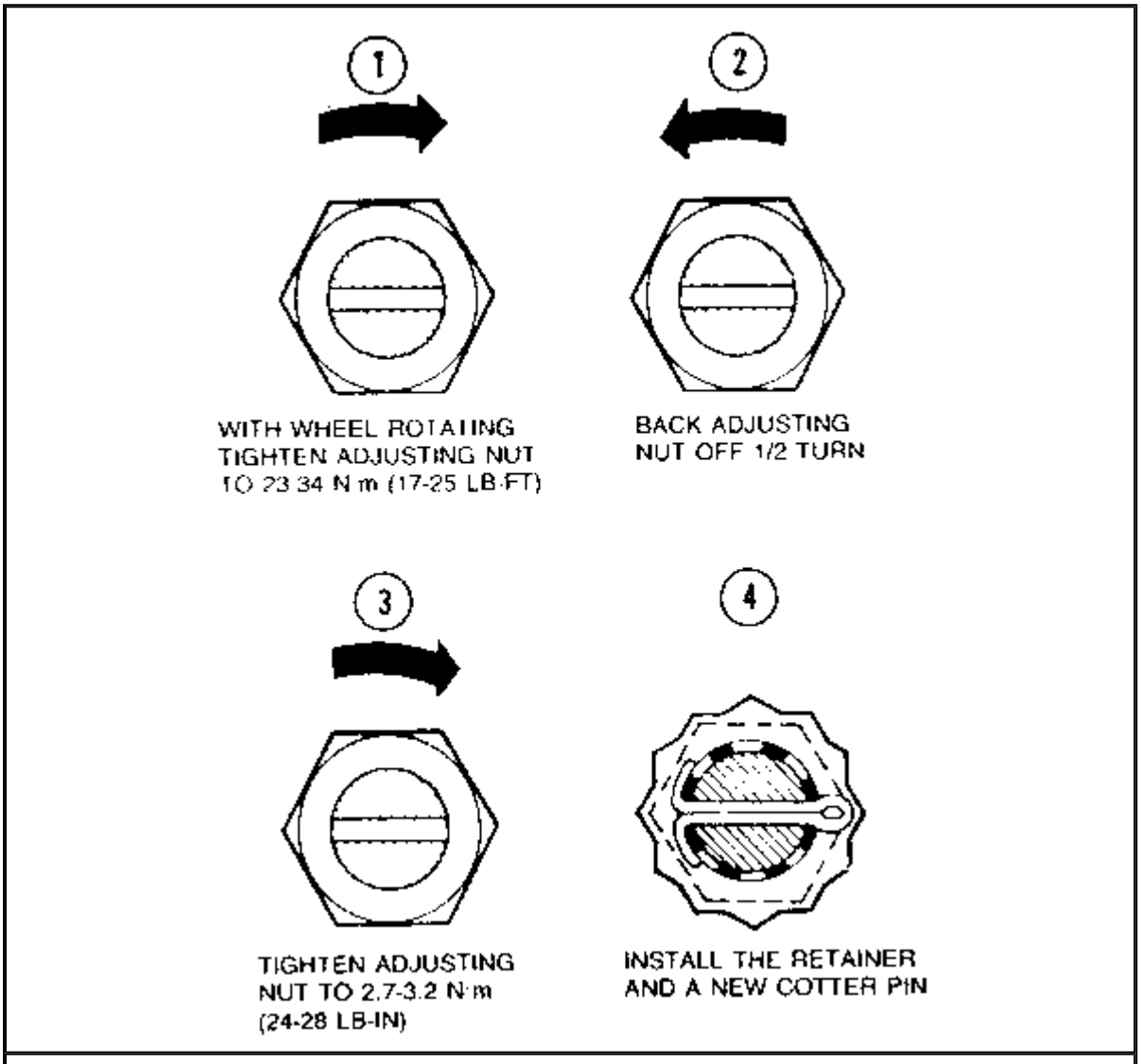
The following procedure applies only to 1986-89 vehicles. Adjustment is not possible on 1990-95 vehicles. This procedure should be performed whenever the wheel is excessively loose on the spindle or it does not rotate freely.

The rear wheel uses a tapered roller bearing which may feel loose whenproperly adjusted; this condition should be considered normal.

1. **Raise and safely support the vehicle until tires clear the floor.**
2. **Remove the wheel cover or the ornament and nut cover. Remove the hub grease cap, being careful not the damage the cap.**

If the vehicle is equipped with styled steel or aluminumwheels, the wheel/tire assembly must be removed to access the dust cover.

3. **Remove the cotter pin and the nut retainer. Discard the cotter pin.**
4. **Back off the adjusting nut one full turn.**
5. **While rotating the hub/drum assembly to seat the bearings, tighten the adjusting nut to 17-25 ft. lbs. (23-24 Nm). Back off the adjusting nut $^{1}/_{2}$ turn, then retighten it to 24-28 inch lbs. (2.7-3.2 Nm).**



Rear wheel bearing adjustment is possible only on 1986-89 vehicles

Click to enlarge

6. **Position the nut retainer over the adjusting nut so the slots are in line with the cotter pin hole, without rotating the adjusting nut.**
7. **Install a new cotter pin, then bend the ends around the retainer flange.**
8. **Check the hub rotation. If the hub rotates freely, install the grease cap. If not, check the bearings for damage and replace, as necessary.**
9. **Install the wheel and tire assembly. If applicable, install the wheel cover or ornament and nut cover. Carefully lower the vehicle.**

Rear Wheel Alignment

CAMBER

Camber is the measure of the wheel tilt from the vertical direction, when the wheel is viewed from the rear of the vehicle. Camber is negative when the top of the wheel is inboard and positive when the top is outboard. Always check for bent, damaged or worn suspension components before determining that adjustment is necessary. The amount of tilt is measured in degrees from the vertical and this measurement is called the camber angle.

Camber is not adjustable on the Sedan. On the Wagon camber is adjustable, but requires special equipment and procedures. If you suspect an alignment problem, have it checked by a qualified repair shop.

TOE-IN

Toe is a measurement of how far a wheel is turned in or out from the straight ahead direction. When the front of the wheel is turned in, the toe is positive. When the front of the wheel is turned out, toe is negative. An incorrect toe setting can affect steering feel and cause excessive tire wear.

Stated another way, toe-in is the amount that the front of the wheels are closer together than the backs of the same wheels. The actual amount of toe-in is normally only a fraction of a degree.

Rear toe is adjustable, but requires special equipment and procedures. If you suspect an alignment problem, have it checked by a qualified repair shop.