

2005 Ford Focus ZX4 S

2005 SUSPENSION Rear Suspension - Focus

2005 SUSPENSION**Rear Suspension - Focus****SPECIFICATIONS****TORQUE SPECIFICATIONS****TORQUE SPECIFICATIONS**

Description	Nm	lb-ft	lb-in
Stabilizer bar to crossmember retaining bolts	48	35	-
Stabilizer bar connecting link to rear lower arm retaining nut	15	11	-
Upper arm retaining bolts	115	85	-
Front lower arm retaining bolts	115	85	-
Rear lower arm to wheel knuckle retaining bolt	115	85	-
Rear lower arm adjustment cam nut	115	85	-
Wheel speed sensor retaining bolt	9	-	80
Brake caliper assembly retaining bolts	28	21	-
Wheel hub retaining nut	235	173	-
Wheel knuckle front mounting retaining bolts	115	85	-
Shock absorber to wheel knuckle mounting retaining bolt	115	85	-
Shock absorber upper mounting retaining nut (all except	18	13	-

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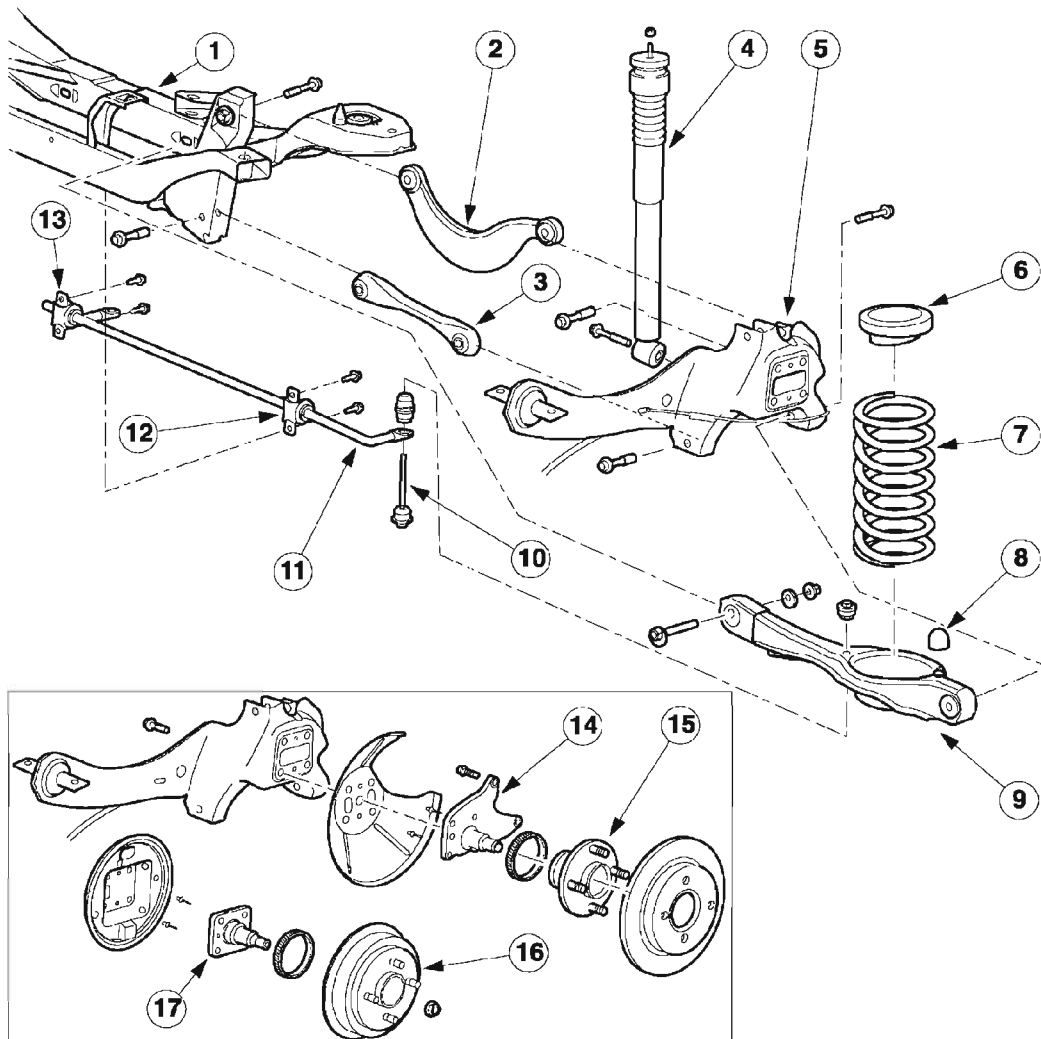
wagon)			
Shock absorber upper mounting retaining bolt (wagon)	115	85	-
Crossmember retaining bolts	115	85	-
Wheel spindle retaining bolts	66	49	-

DESCRIPTION AND OPERATION

REAR SUSPENSION

2005 Ford Focus ZX4 S

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E0001615

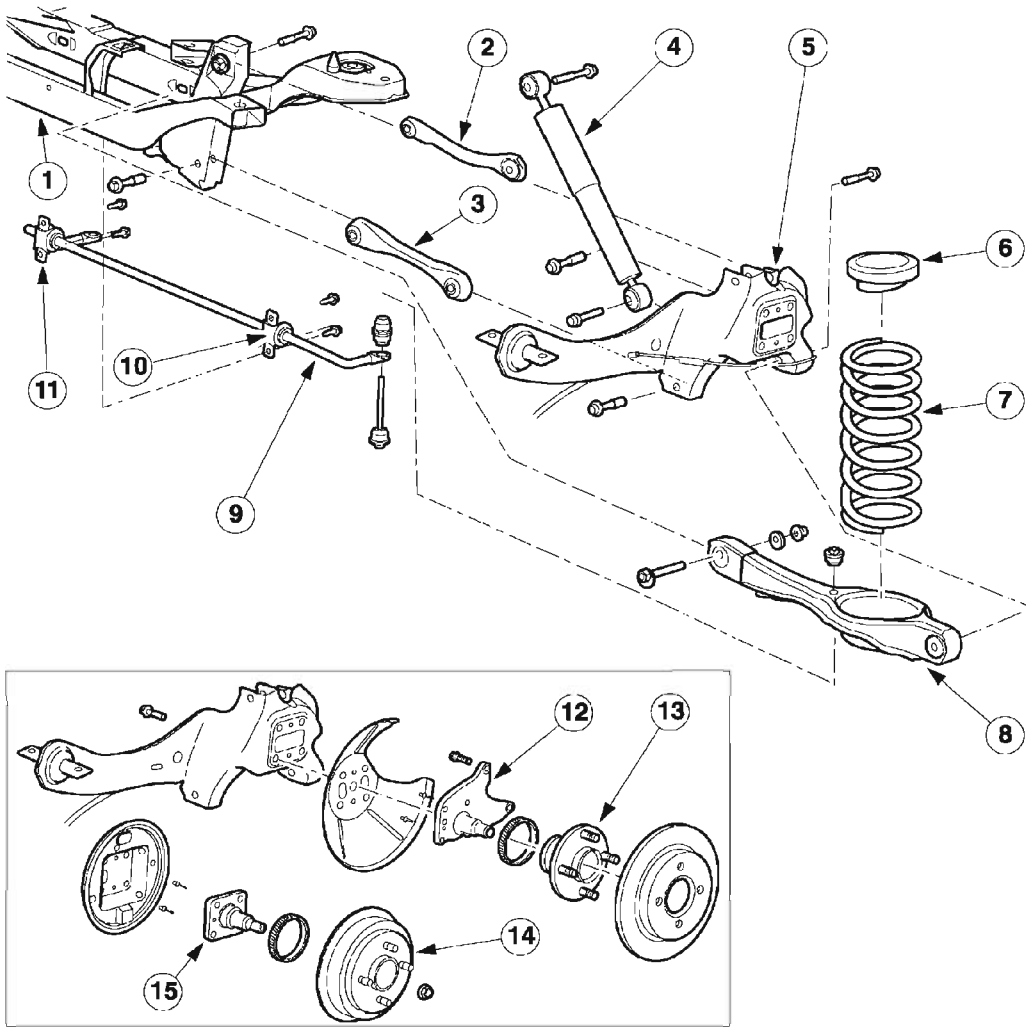
Item	Part Number	Description
1	—	Crossmember
2	—	Upper arm
3	—	Front lower arm
4	—	Shock absorber assembly
5	—	Tie-bar and knuckle
6	—	Spring pad
7	—	Spring
8	—	Bump stop
9	—	Rear lower arm
10	—	Stabilizer bar link

Item	Part Number	Description
11	—	Stabilizer bar
12	—	Stabilizer bar bushing
13	—	Stabilizer bar bushing clamp
14	—	Wheel spindle (disc brakes)
15	—	Wheel hub (disc brakes)
16	—	Drum and hub assembly (drum brakes)
17	—	Wheel spindle (drum brakes)

Fig. 1: Identifying Rear Suspension Components - All Except Wagon
 Courtesy of FORD MOTOR CO.

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E0001616

Item	Part Number	Description
1	—	Crossmember
2	—	Upper arm
3	—	Front lower arm
4	—	Shock absorber
5	—	Tie-bar and knuckle
6	—	Spring pad
7	—	Spring
8	—	Rear lower arm

Item	Part Number	Description
9	—	Stabilizer bar
10	—	Stabilizer bar bushing
11	—	Stabilizer bar bushing clamp
12	—	Wheel spindle (disc brakes)
13	—	Wheel hub (disc brakes)
14	—	Drum and hub assembly (drum brakes)
15	—	Wheel spindle (drum brakes)

Fig. 2: Identifying Rear Suspension Components - Wagon
Courtesy of FORD MOTOR CO.

DIAGNOSIS AND TESTING

REAR SUSPENSION

For additional information, refer to **SUSPENSION SYSTEM-GENERAL INFORMATION**.

REMOVAL AND INSTALLATION

WHEEL HUB

Removal

All vehicles

1. Remove the dust cap.

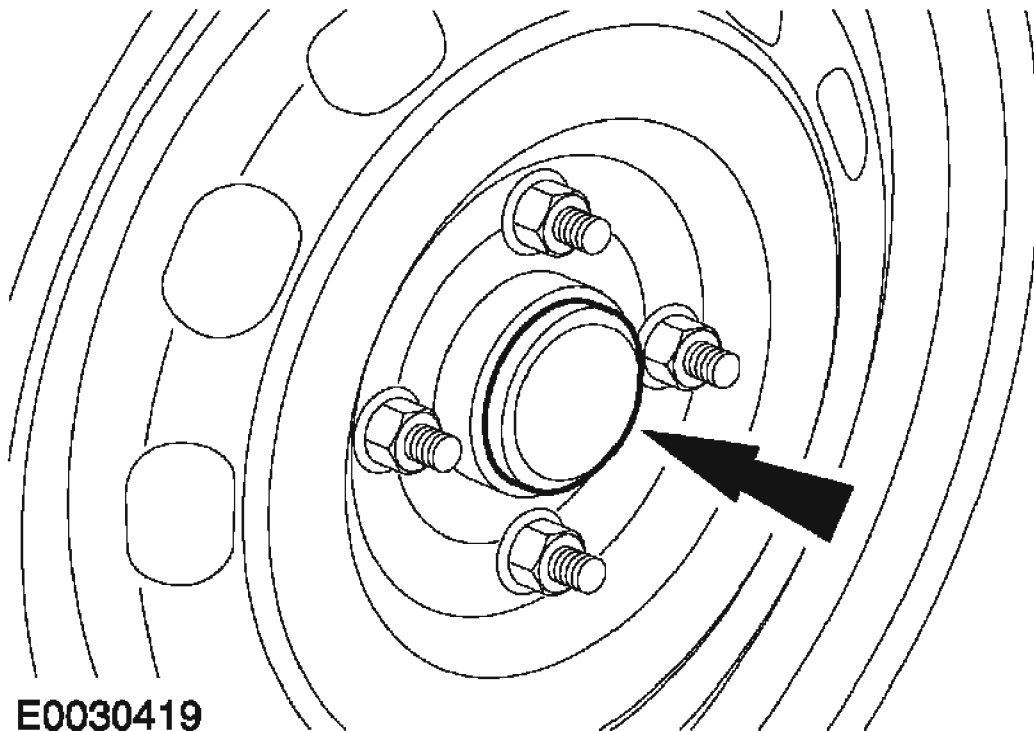
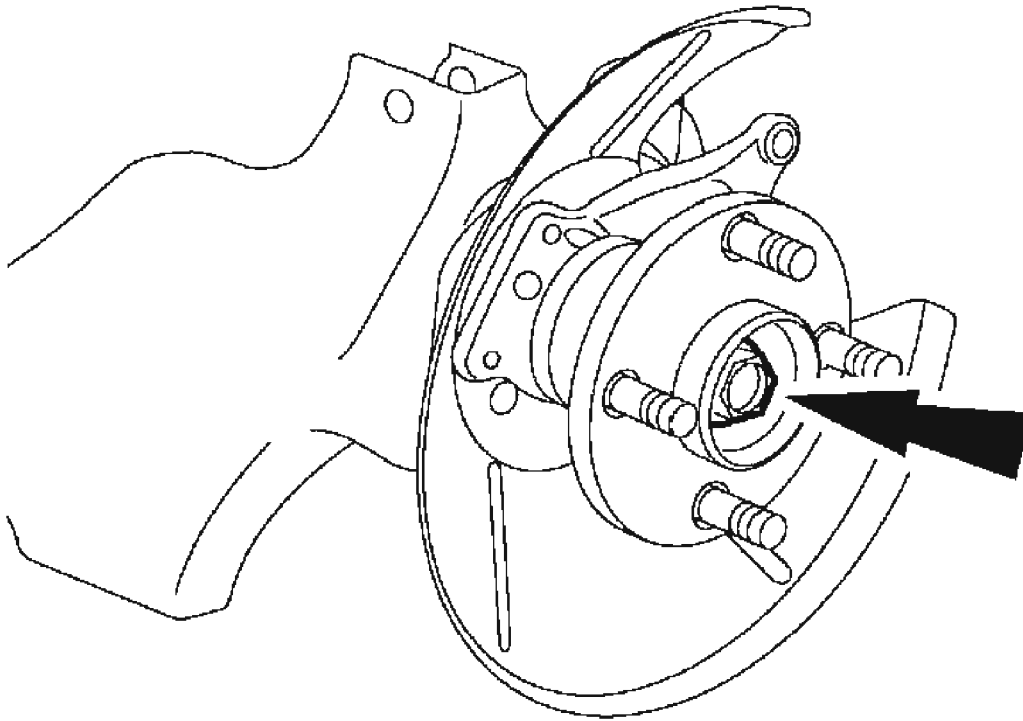


Fig. 3: Removing Dust Cap
Courtesy of FORD MOTOR CO.

Vehicles with rear disc brakes

2. Remove the rear brake disc. For additional information, refer to **REAR DISC BRAKE**.

CAUTION: Use a socket to remove the wheel hub retaining nut to prevent damage.



E0003903

Fig. 4: Removing Wheel Hub Retaining Nut
Courtesy of FORD MOTOR CO.

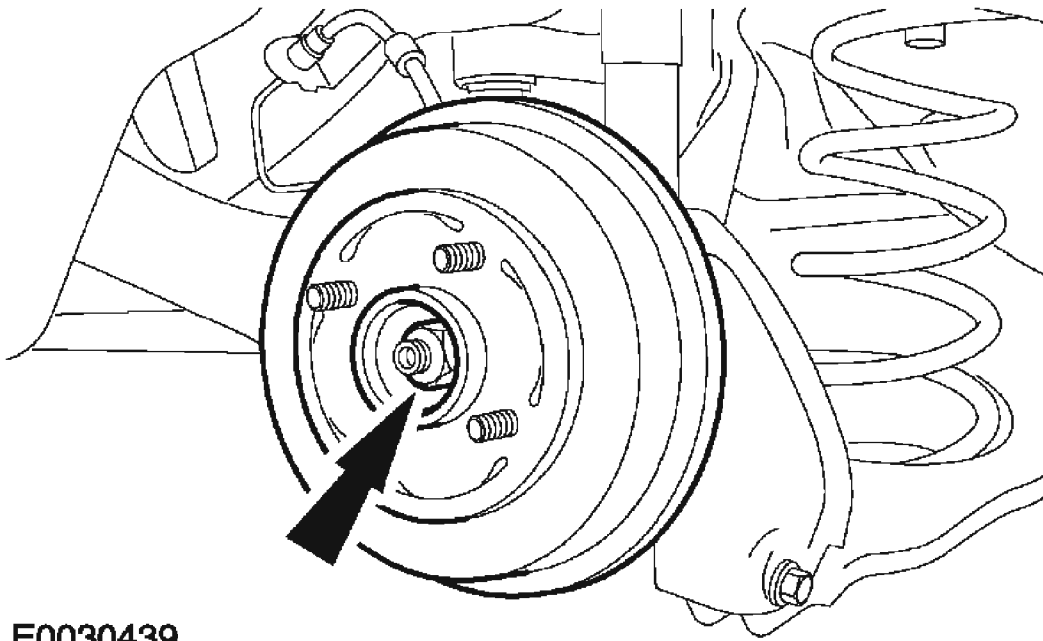
3. Remove the wheel hub.
 - Remove the wheel hub retaining nut.

Vehicles with rear drum brakes

CAUTION: The wheel hub removal in this procedure is for installing new wheel bearings, not for access to brake system components.

4. Remove the wheel and tire. For additional information, refer to **WHEELS AND TIRES**.
5. Release the parking brake.

CAUTION: Use a socket to remove the wheel hub retaining nut to prevent damage.



E0030439

Fig. 5: Removing Wheel Hub Retaining Nut
Courtesy of FORD MOTOR CO.

6. Remove the wheel hub.
 - Remove the wheel hub retaining nut.

Installation

Vehicles with rear drum brakes

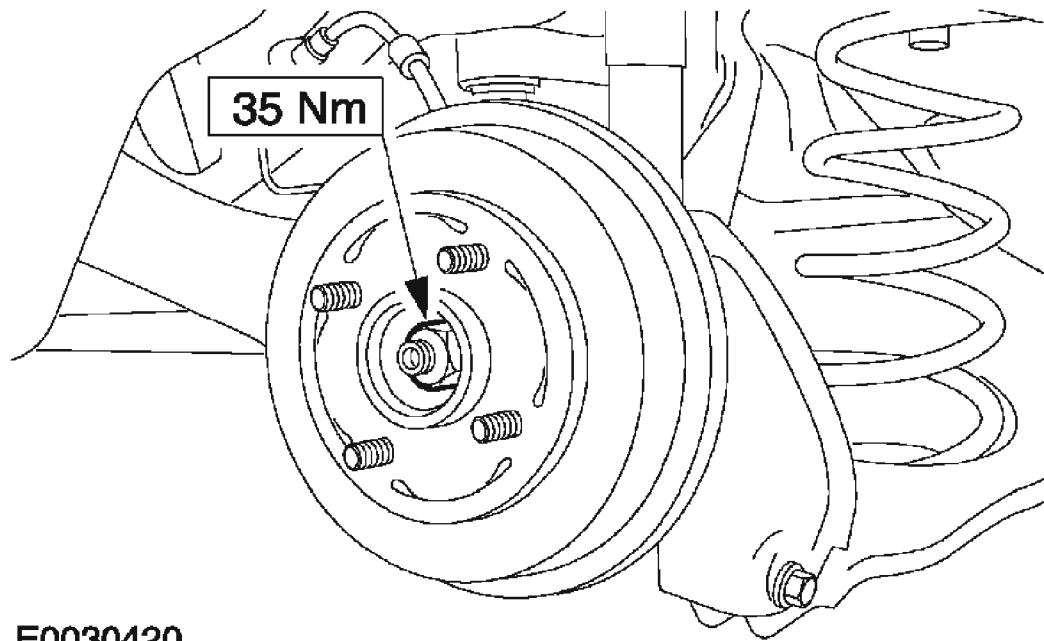
CAUTION: Avoid any impact on the wheel speed sensor ring.

CAUTION: Make sure the wheel speed sensor ring is clean.

CAUTION: Avoid any contact between the wheel speed sensor ring and a magnetic surface.

CAUTION: The wheel hub retaining nut can be re-used four times, mark the wheel hub retaining nut.

NOTE: Do not fully tighten the wheel hub retaining nut at this stage.

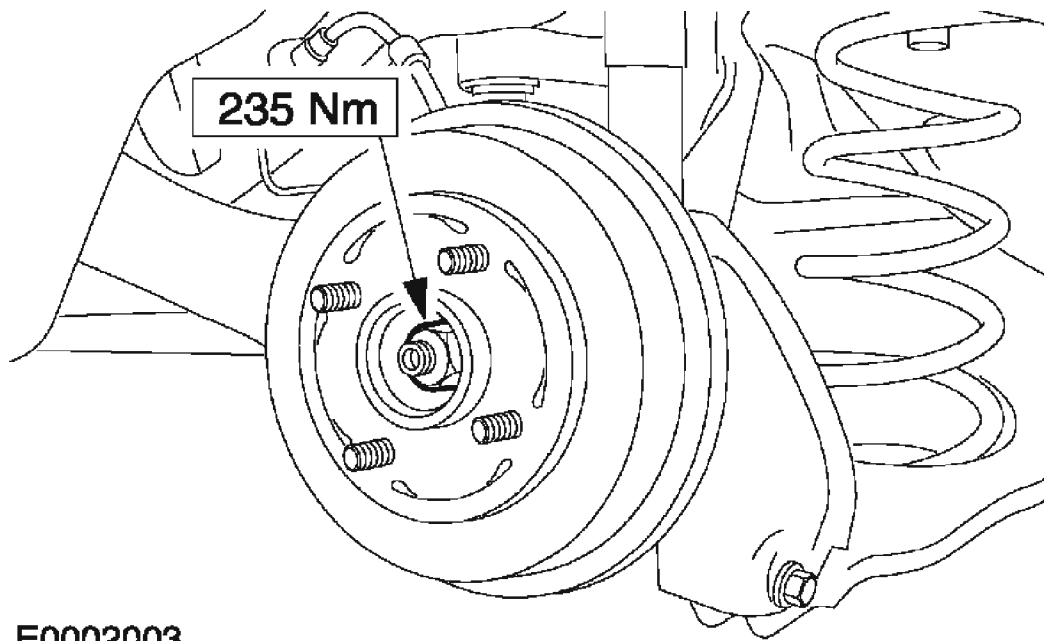


E0030420

Fig. 6: Installing Wheel Hub
Courtesy of FORD MOTOR CO.

1. Install the wheel hub.

CAUTION: Rotate the brake drum 10 times in the opposite direction when tightening the wheel hub retaining nut to prevent damage to the bearing.



E0002003

Fig. 7: Tightening Wheel Hub Retaining Nut
Courtesy of FORD MOTOR CO.

2. Tighten the wheel hub retaining nut.
3. Apply the parking brake.
4. Install the wheel and tire. For additional information, refer to **REAR DISC BRAKE** .

Vehicles with rear disc brakes

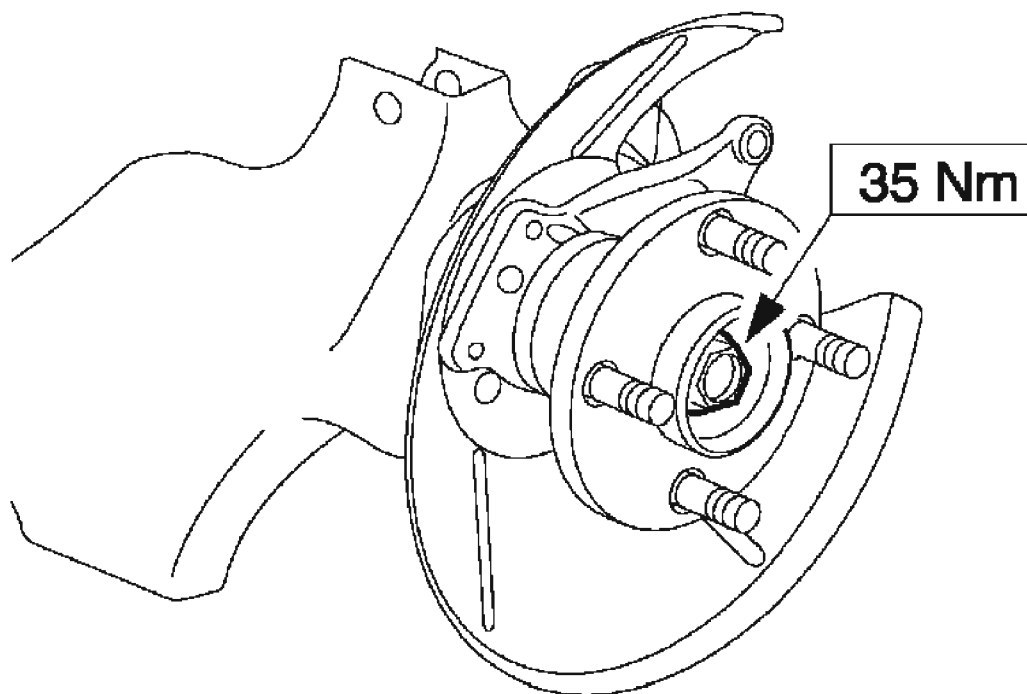
CAUTION: Avoid any impact on the wheel speed sensor ring.

CAUTION: Make sure the wheel speed sensor ring is clean.

CAUTION: Avoid any contact between the wheel speed sensor ring and a magnetic surface.

CAUTION: The wheel hub retaining nut can be re-used four times, mark the wheel hub retaining nut.

NOTE: Do not fully tighten the wheel hub retaining nut at this stage.



E0030421

Fig. 8: Installing Wheel Hub
Courtesy of FORD MOTOR CO.

5. Install the wheel hub.

CAUTION: Rotate the hub assembly 10 times in the opposite direction when tightening the wheel hub retaining nut to prevent damage to the bearing.

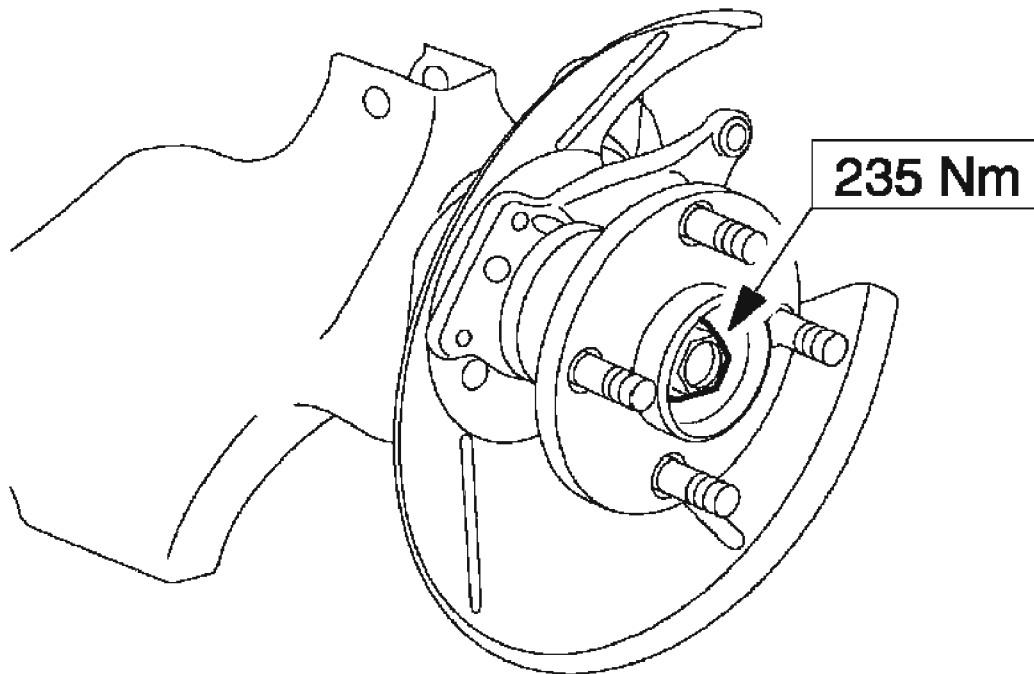
**E0003906**

Fig. 9: Tightening Wheel Hub Retaining Nut
Courtesy of FORD MOTOR CO.

6. Tighten the wheel hub retaining nut.
7. Install the rear brake disc. For additional information, refer to **REAR DISC BRAKE**.

All vehicles

NOTE: If the dust cap was damaged on removal a new dust cap must be installed.

8. Install the dust cap

WHEEL BEARING

Special Tool(s)

SPECIAL TOOLS DESCRIPTION

	Installer, Axle Bearing 205-146 (T80T-4000N)
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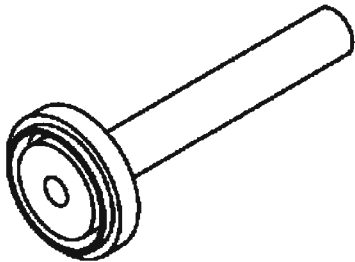


205-146



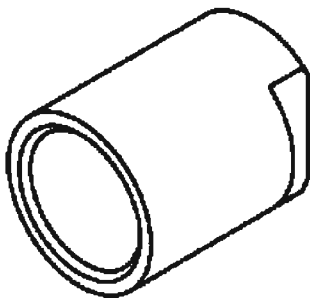
211-140

Installer, Steering Gear Pinion Oil Seal
211-140 (T88C-3504-DH)



204344

Installer, Water Seal Carrier 204-322



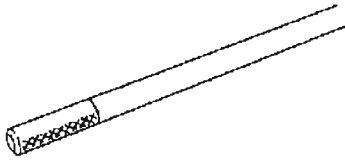
204325

Installer, Seal 204-325

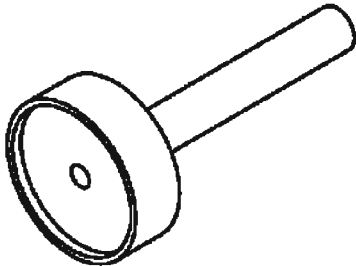
Adaptor for 303-224 (Handle) 205-153
(T80-T4000-W)

2005 Ford Focus ZX4 S

2005 SUSPENSION Rear Suspension - Focus



ST2751A



206083

Installer, PTO Dust Flange 308-432

Removal

All vehicles

1. Remove the wheel hub. For additional information, refer to **WHEEL HUB**.

Vehicles With Anti-Lock Brakes

2. Remove and discard the wheel speed sensor ring.

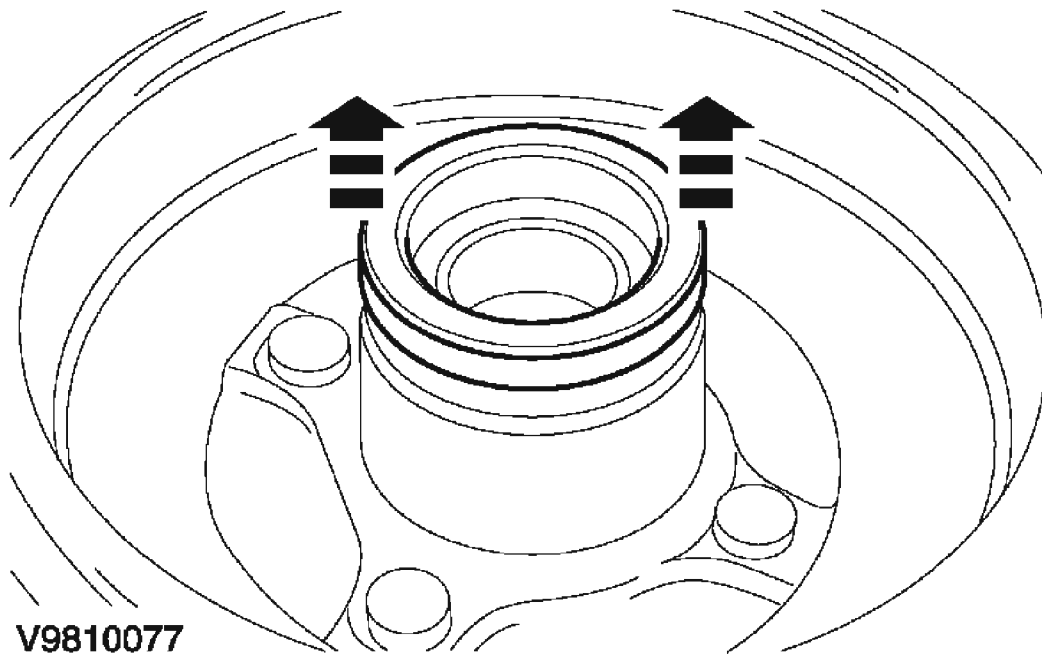


Fig. 10: Removing Wheel Speed Sensor Ring
Courtesy of FORD MOTOR CO.

All vehicles

3. Remove the circlip.

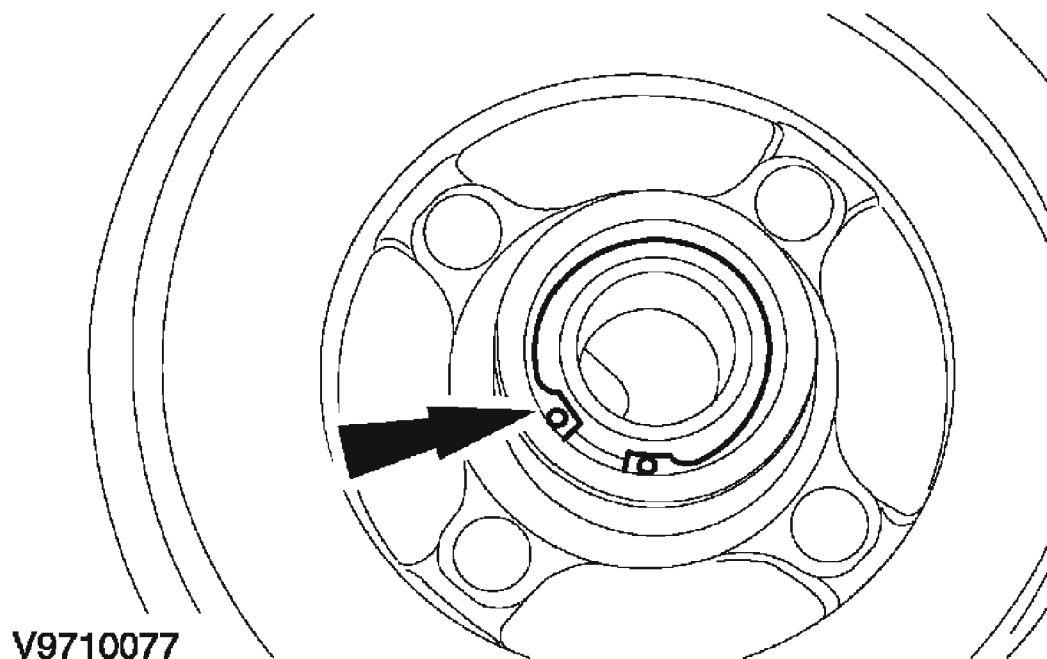


Fig. 11: Identifying Wheel Bearing Circlip
Courtesy of FORD MOTOR CO.

4. Using the special tool, remove the wheel bearing.

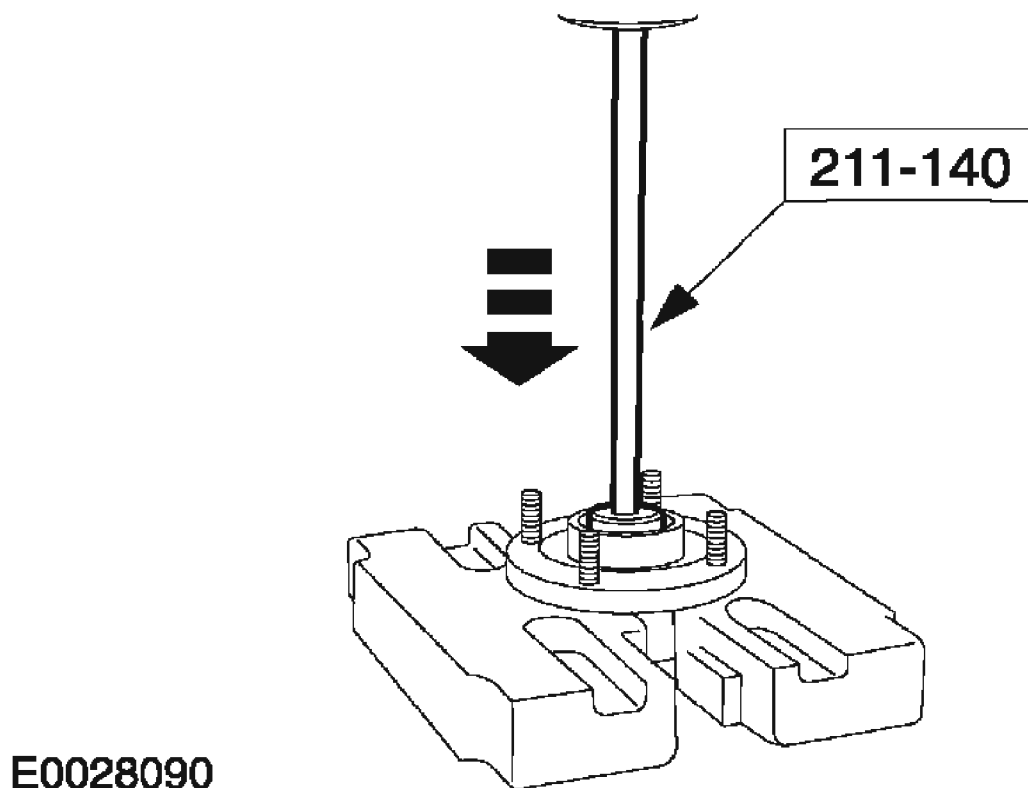
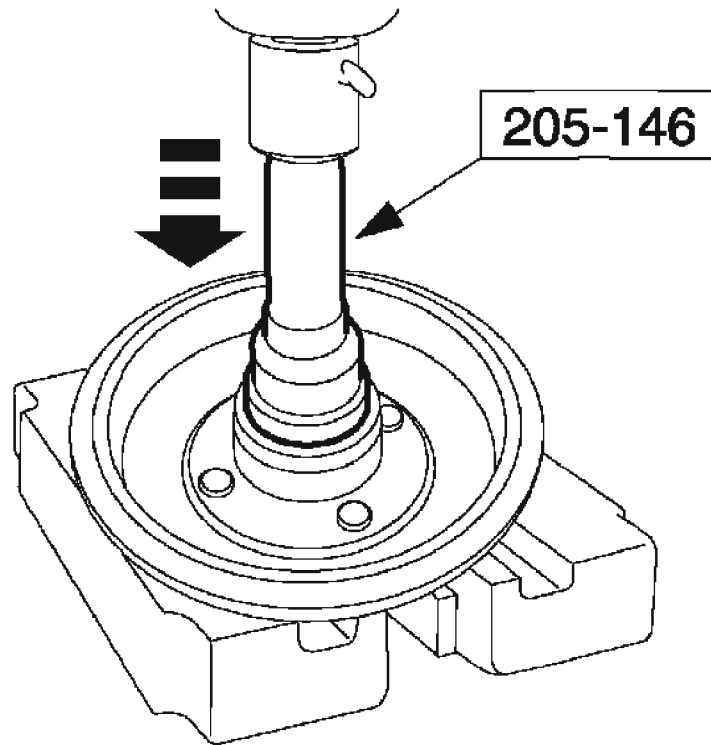


Fig. 12: Removing Wheel Bearing Using special tool
Courtesy of FORD MOTOR CO.

Installation

All vehicles

CAUTION: Support the brake drum on the wheel mounting face
and not on the wheel nut studs.



E0028089

Fig. 13: Installing Wheel Bearing
Courtesy of FORD MOTOR CO.

1. Using the special tool, install a new wheel bearing.
2. Install the circlip.

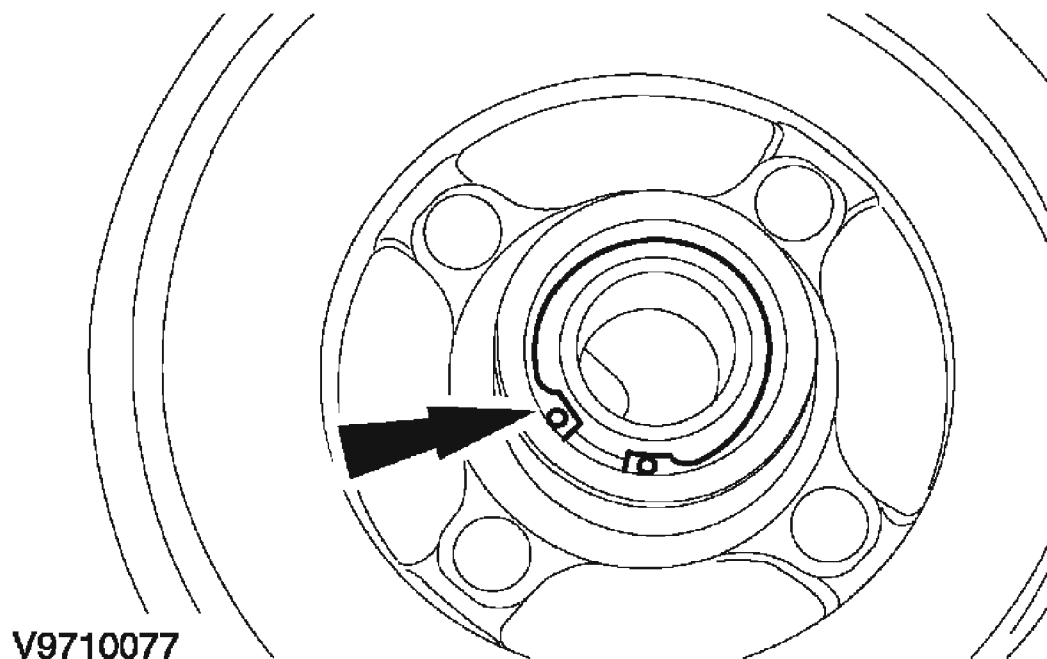


Fig. 14: Identifying Wheel Bearing Circlip
Courtesy of FORD MOTOR CO.

3. Using the special tools, install the water seal carrier into the wheel bearing assembly.

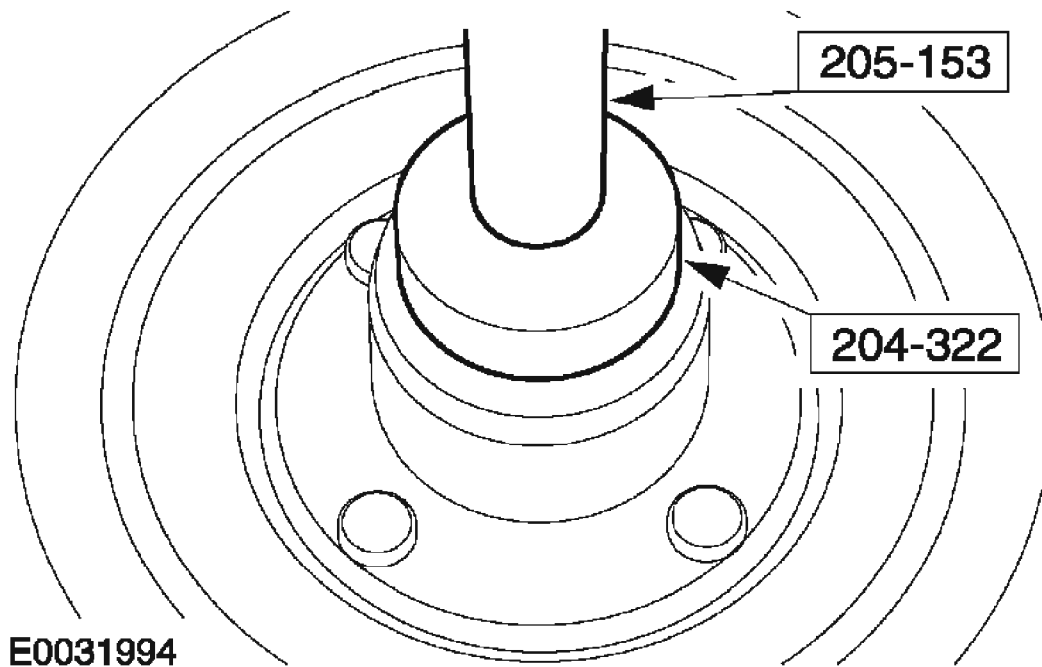


Fig. 15: Installing Water Seal Carrier Into Wheel Bearing Assembly
Courtesy of FORD MOTOR CO.

Vehicles with anti-lock brakes

CAUTION: Avoid any impact on the wheel speed sensor ring.

CAUTION: Make sure the wheel speed sensor ring is clean.

CAUTION: Avoid any contact between the wheel speed sensor ring and a magnetic surface.

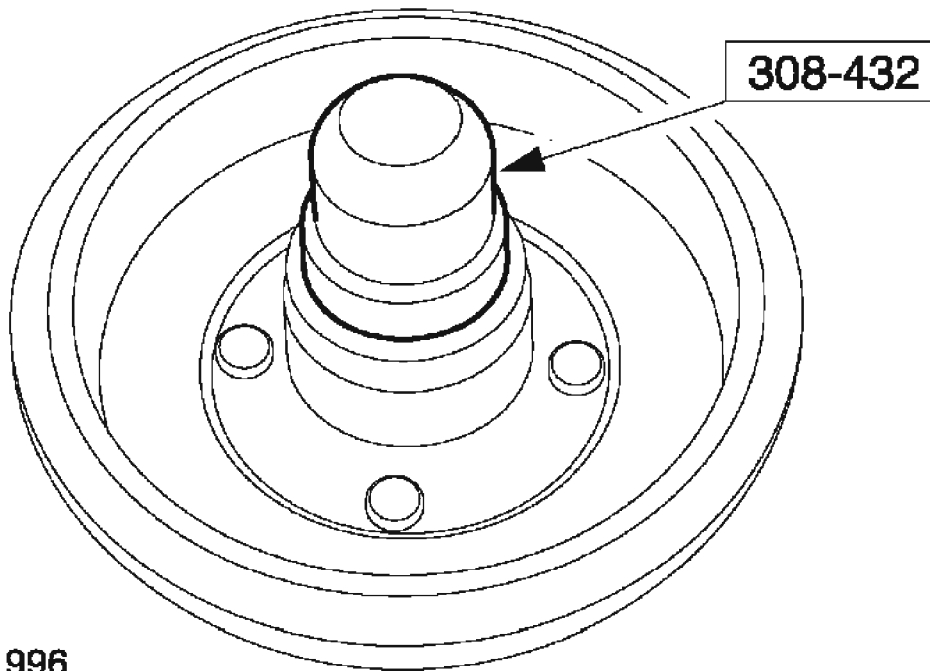


Fig. 16: Installing Wheel Speed Sensor Ring
Courtesy of FORD MOTOR CO.

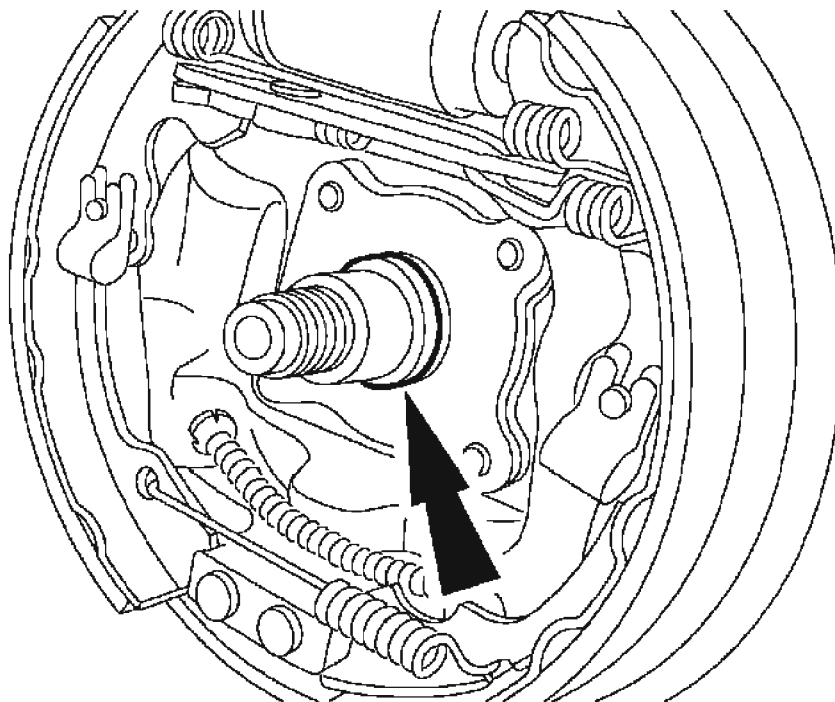
4. Using the special tool, install a new wheel speed sensor ring.

All vehicles

NOTE: The following step is only required for vehicles without a water seal installed.

5. Using suitable emery cloth, remove any pitting or corrosion from the leading edge of the wheel spindle seal running surface.

NOTE: The following step is only required for vehicles without a water seal installed.



E0033336

Fig. 17: Attaching Water Seal And Protective Cap To Wheel Spindle
Courtesy of FORD MOTOR CO.

6. Attach the water seal and protective cap to the wheel spindle.

NOTE: **The following step is only required for vehicles without a water seal installed.**

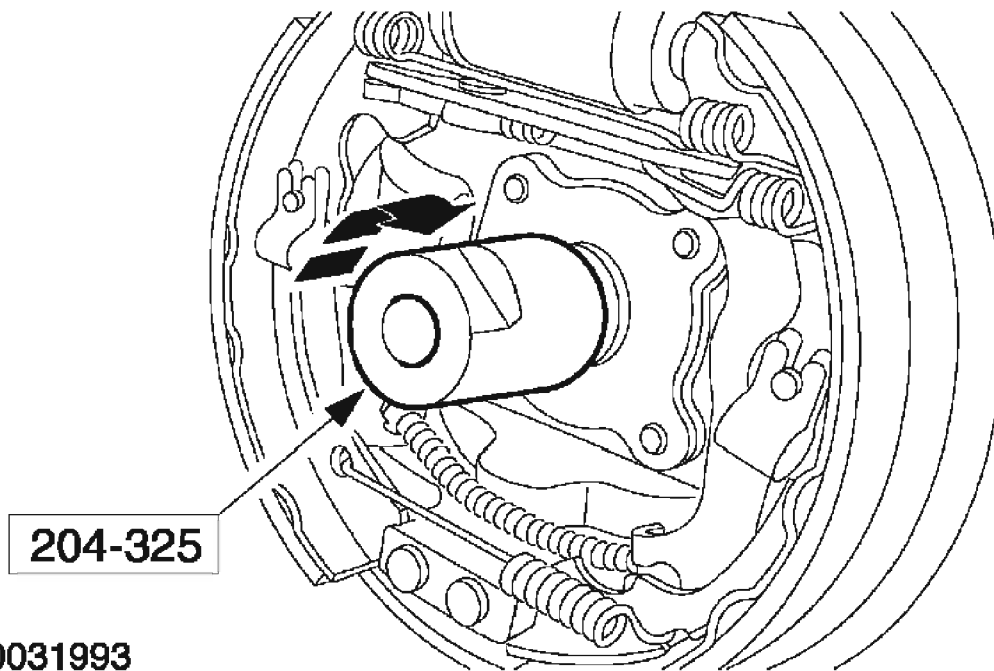


Fig. 18: Installing Water Seal
Courtesy of FORD MOTOR CO.

7. Install the water seal in two stages.
 - Stage 1: Using the special tool, engage the water seal and protective cap.
 - Stage 2: Tighten to 7 Nm.
8. Remove the special tool.
 - Remove the protective cap.
9. Install the wheel hub. For additional information, refer to **WHEEL HUB**.

WHEEL BEARING - SVT

Special Tool(s)

SPECIAL TOOLS DESCRIPTION

	Installer, Axle Bearing 205-146 (T80T-4000N)
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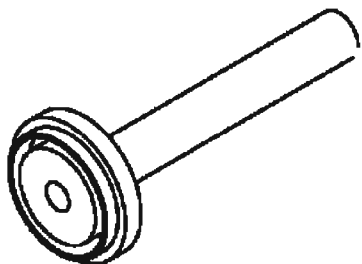


205-146



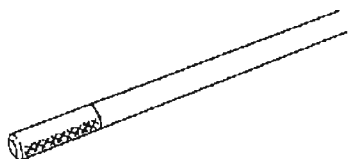
211-140

Installer, Steering Gear Pinion Oil Seal
211-140 (T88C-3504-DH)



204343

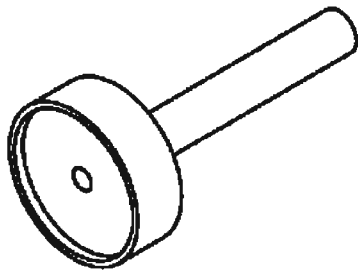
Installer, Water Seal Carrier 204-323



ST2751A

Adaptor for 303-224 (Handle) 205-153
(T80T-4000-W)

Installer, PTO Dust Flange 308-432



206083

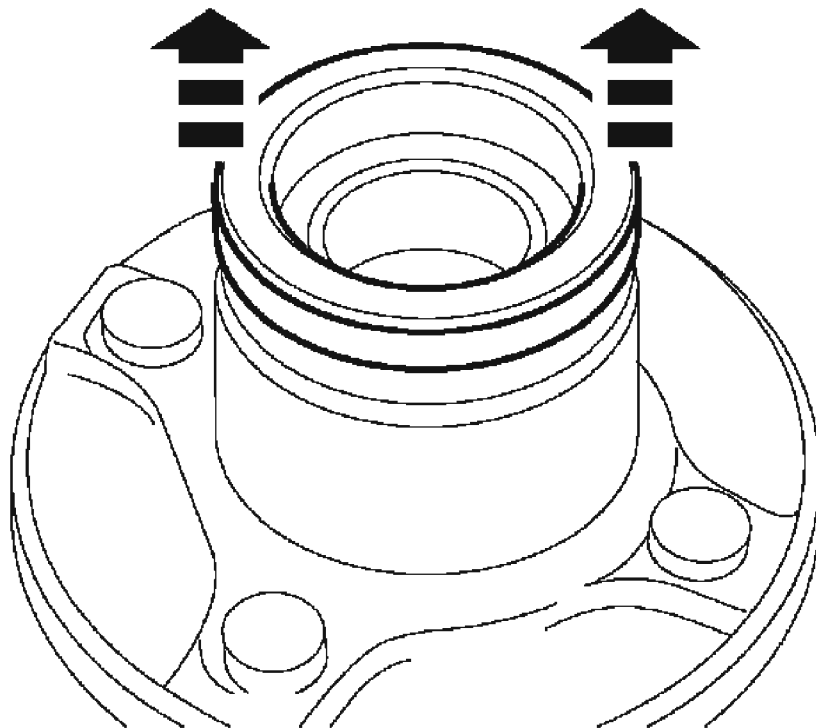
Removal

All vehicles

1. Remove the wheel hub.

Vehicles with anti-lock brakes

2. Remove and discard the wheel speed sensor ring.



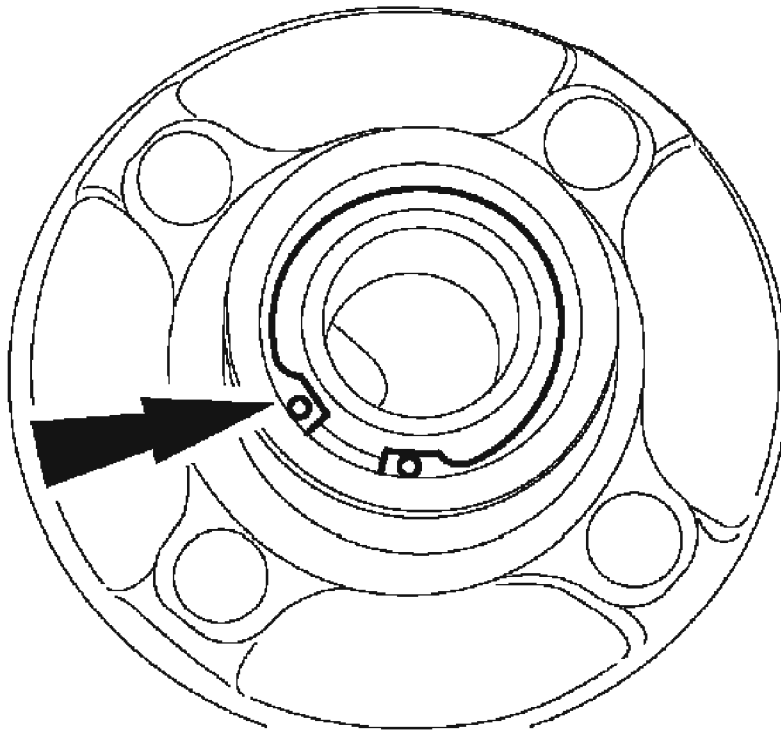
E0033367

Fig. 19: Removing Wheel Speed Sensor Ring

Courtesy of FORD MOTOR CO.

All vehicles

3. Using a suitable screwdriver, remove the water seal carrier (if equipped).
4. Remove the circlip.



E0033368

Fig. 20: Removing Circlip
Courtesy of FORD MOTOR CO.

5. Using the special tool, remove the wheel bearing.

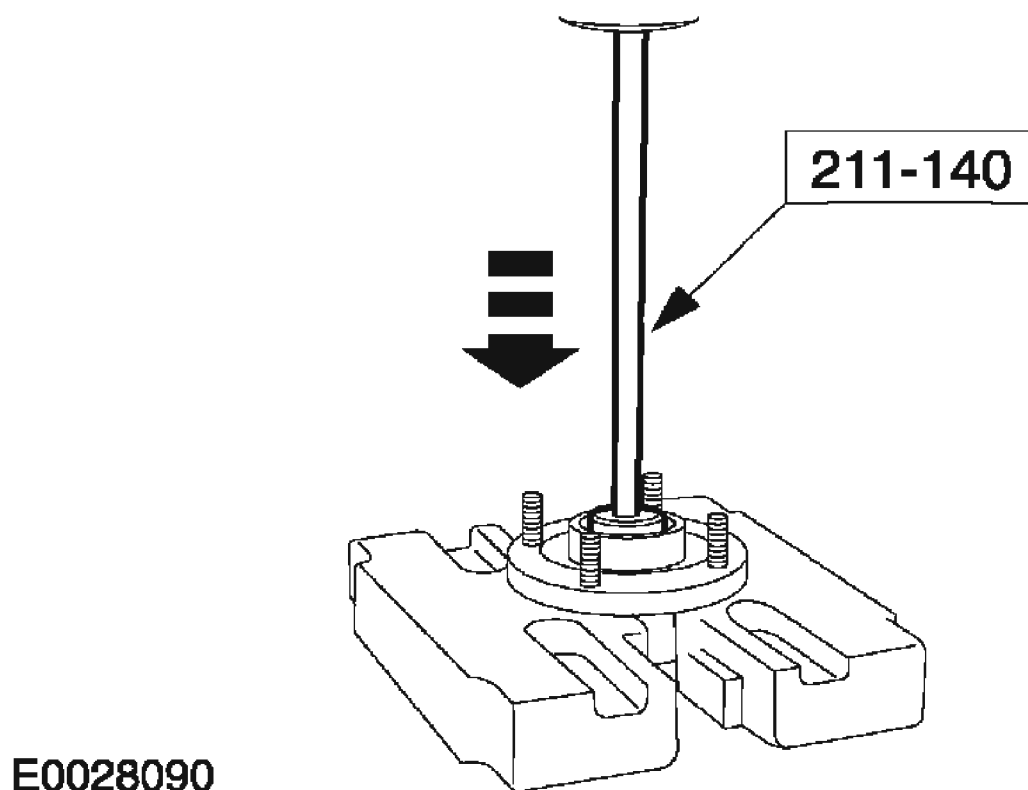


Fig. 21: Removing Wheel Bearing
Courtesy of FORD MOTOR CO.

NOTE: A new wheel spindle is supplied with a water seal installed.

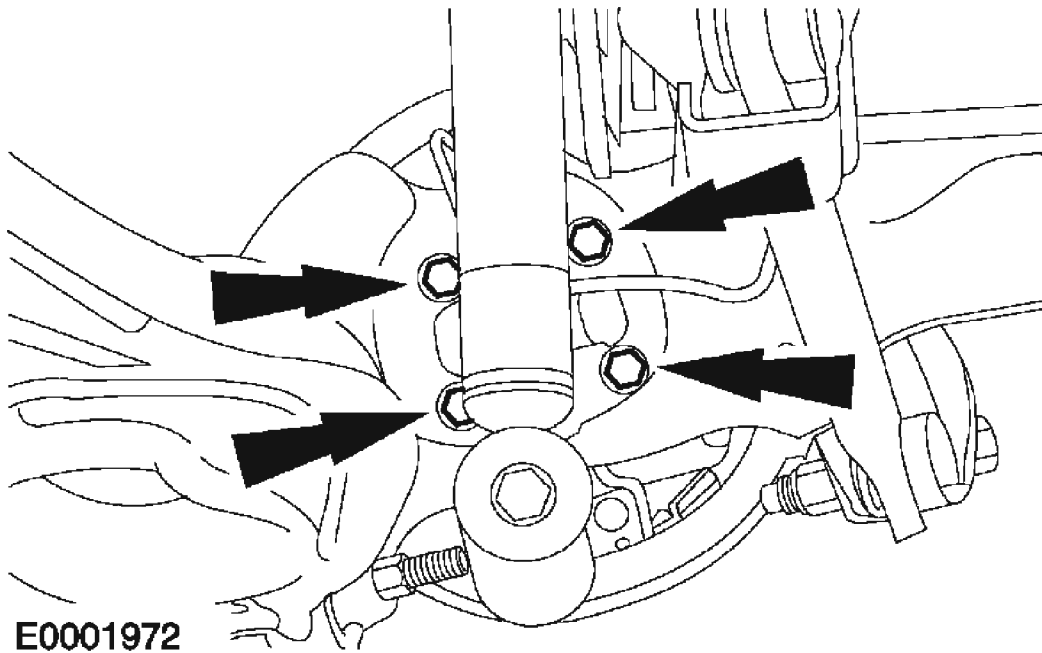


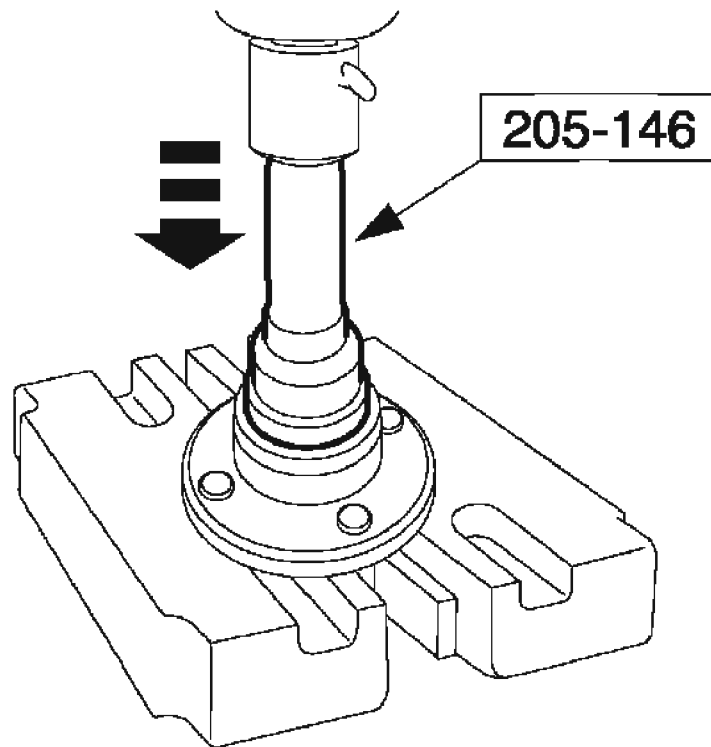
Fig. 22: Removing Wheel Spindle
Courtesy of FORD MOTOR CO.

6. Remove and discard the wheel spindle.

Installation

All vehicles

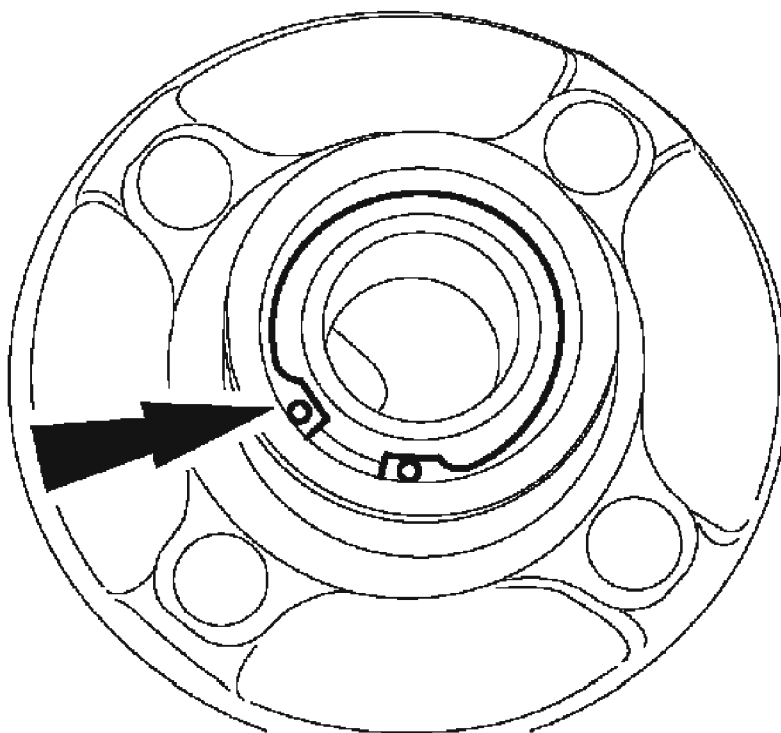
1. Using the special tool, install a new wheel bearing.



E0033369

Fig. 23: Installing Wheel Bearing
Courtesy of FORD MOTOR CO.

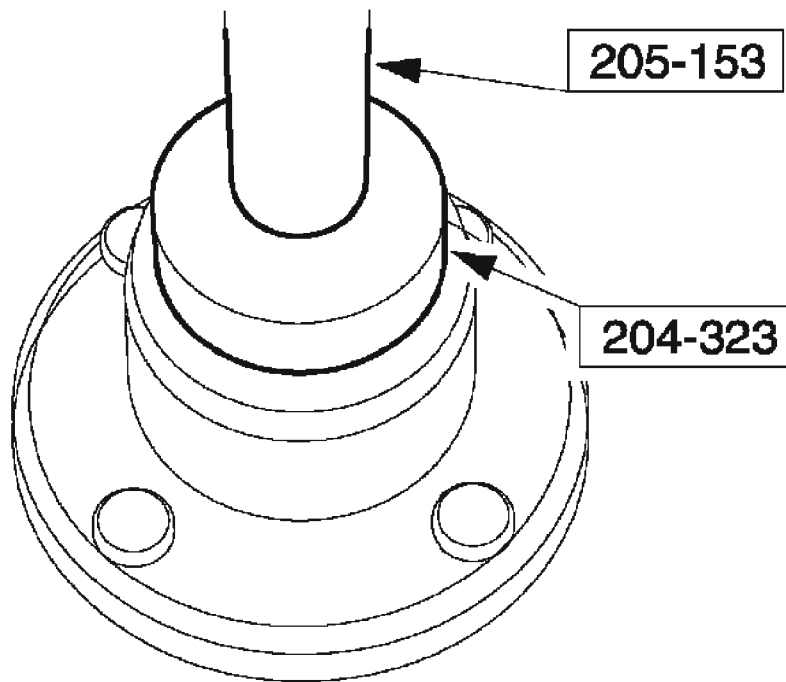
2. Install the circlip.



E0033368

Fig. 24: Installing Circlip
Courtesy of FORD MOTOR CO.

3. Using the special tools, install the water seal carrier.



E0033370

Fig. 25: Installing Water Seal Carrier
Courtesy of FORD MOTOR CO.

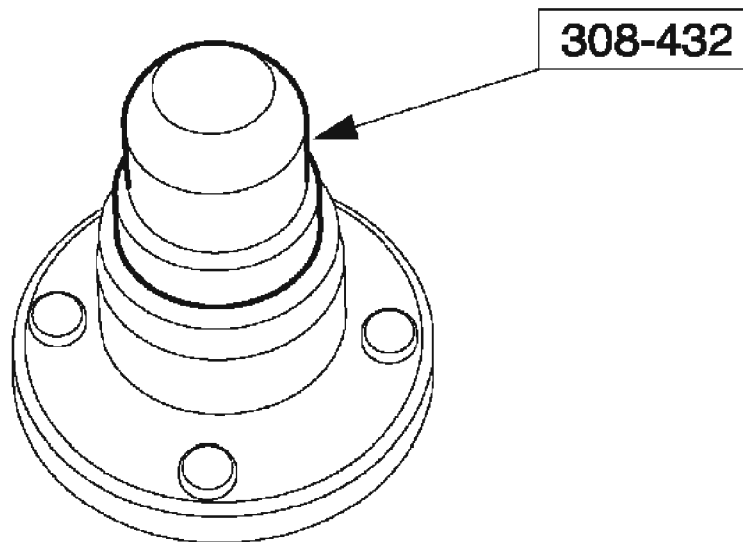
Vehicles with anti-lock brakes

CAUTION: Avoid any impact on the wheel speed sensor ring.

CAUTION: Make sure the wheel speed sensor ring is clean.

CAUTION: Avoid any contact between the wheel speed sensor ring and a magnetic surface.

NOTE: Install wheel speed sensor ring.



E0033371

Fig. 26: Installing Wheel Speed Sensor Ring
Courtesy of FORD MOTOR CO.

4. Using the special tool, install the wheel speed sensor ring.

All vehicles

NOTE: **Install a new wheel spindle.**

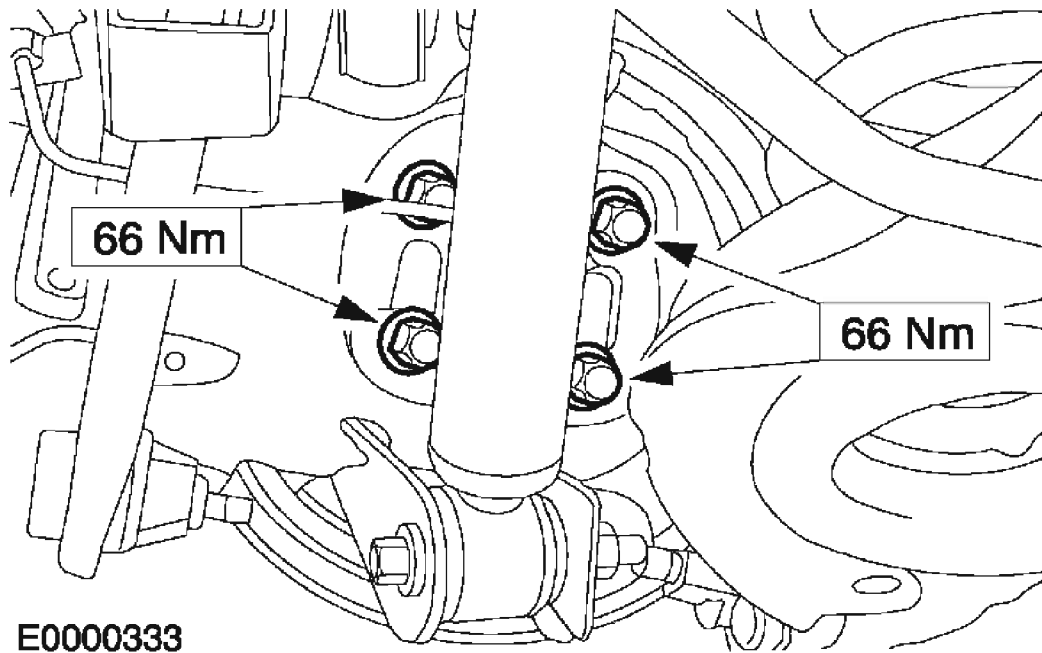


Fig. 27: Installing Wheel Spindle
Courtesy of FORD MOTOR CO.

5. Install the wheel spindle.
6. Install the wheel hub. For additional information, refer to **WHEEL HUB**.

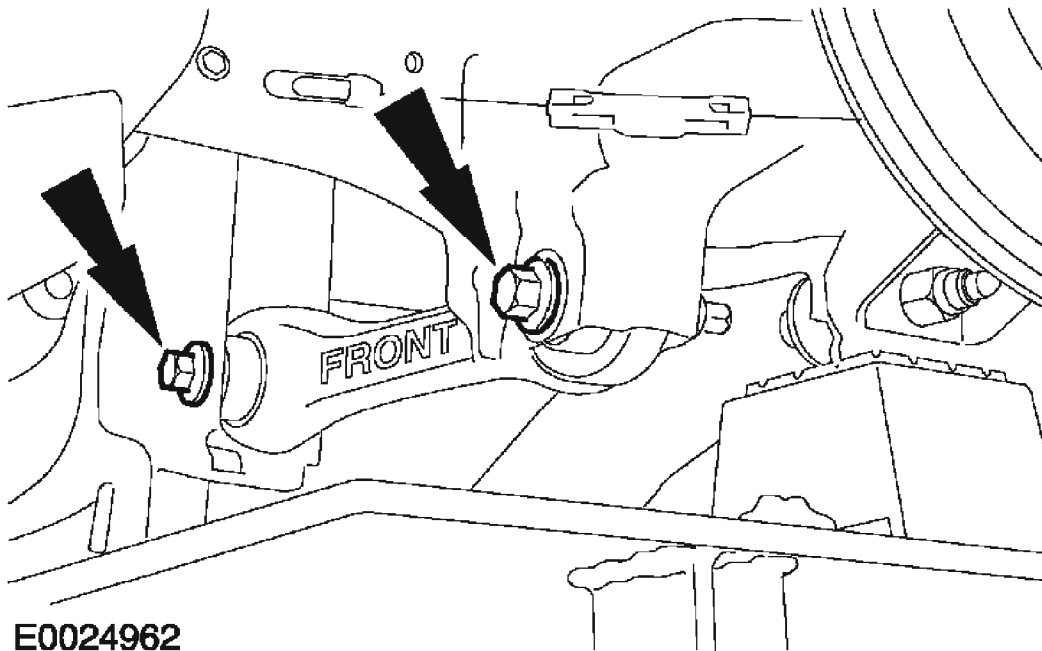
ARM - FRONT, LOWER

Removal

1. With the vehicle in NEUTRAL, position it on a hoist. For additional information, refer to **JACKING AND LIFTING**.

CAUTION: The front lower arm is marked FRONT. Make a note of the position of the front lower arm to aid installation.

2. Remove the front lower arm.



E0024962

Fig. 28: Removing Front Lower Arm
Courtesy of FORD MOTOR CO.

Installation

NOTE: Final tightening of the rear suspension components should be carried out at or near curb height setting.

1. Install the front lower arm.

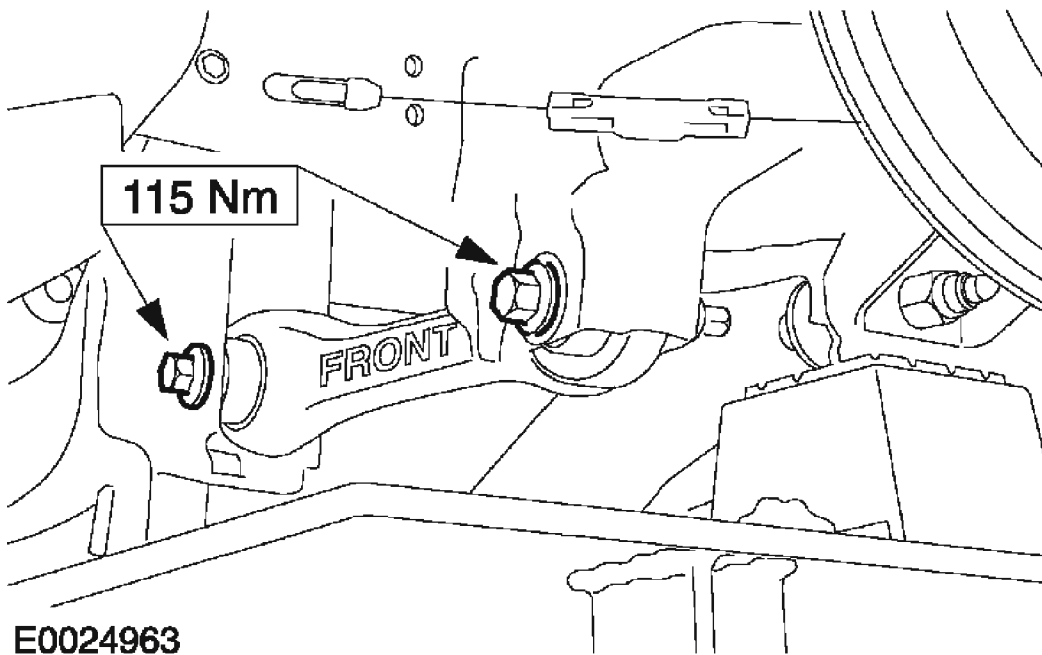


Fig. 29: Installing Front Lower Arm
Courtesy of FORD MOTOR CO.

ARM - REAR, LOWER

Removal

All vehicles

1. Remove the spring. For additional information, refer to **SPRING, SPRING - 3-DOOR/4-DOOR** or **SPRING - WAGON**.
2. Mark the position of the rear lower arm adjustment cam to the crossmember.

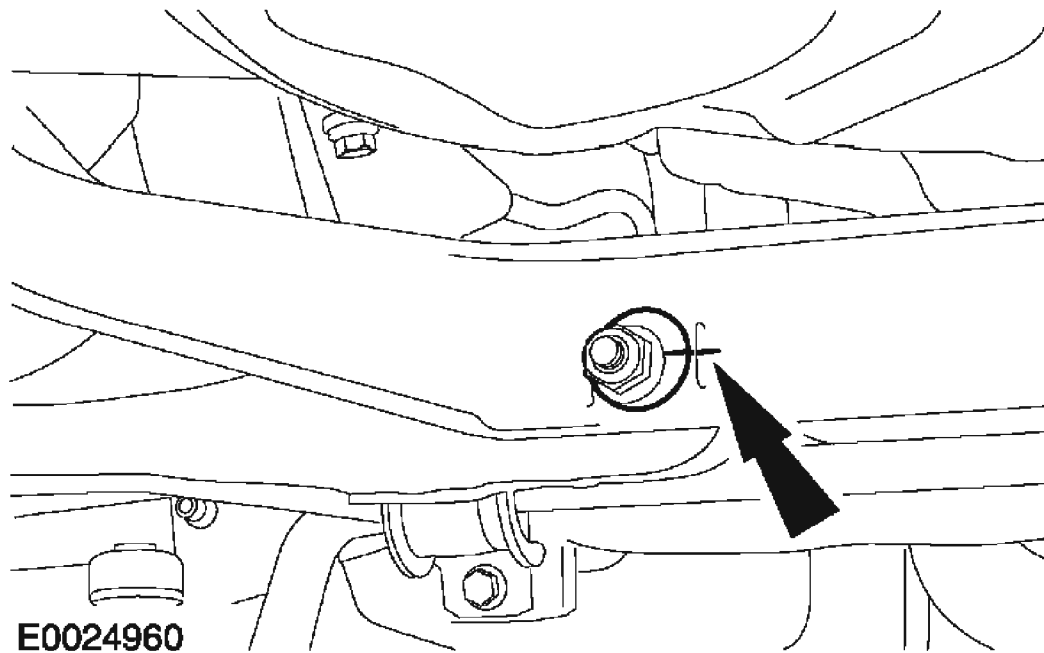
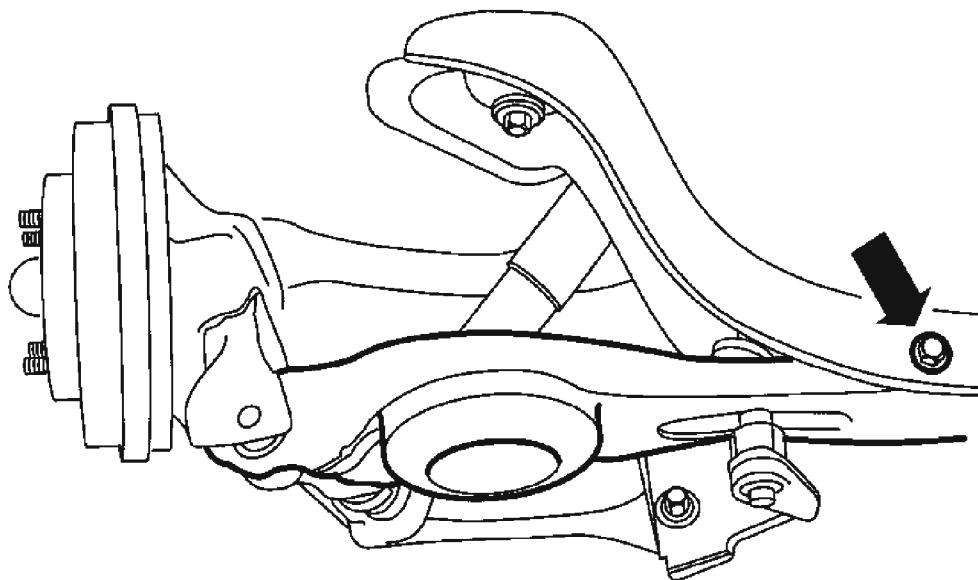


Fig. 30: Removing Spring
Courtesy of FORD MOTOR CO.

Wagon

3. Remove the rear lower arm.



TIE45643

Fig. 31: Removing Rear Lower Arm
Courtesy of FORD MOTOR CO.

3-door, 4-door and 5-door

4. Detach the stabilizer bar from the rear lower arm.

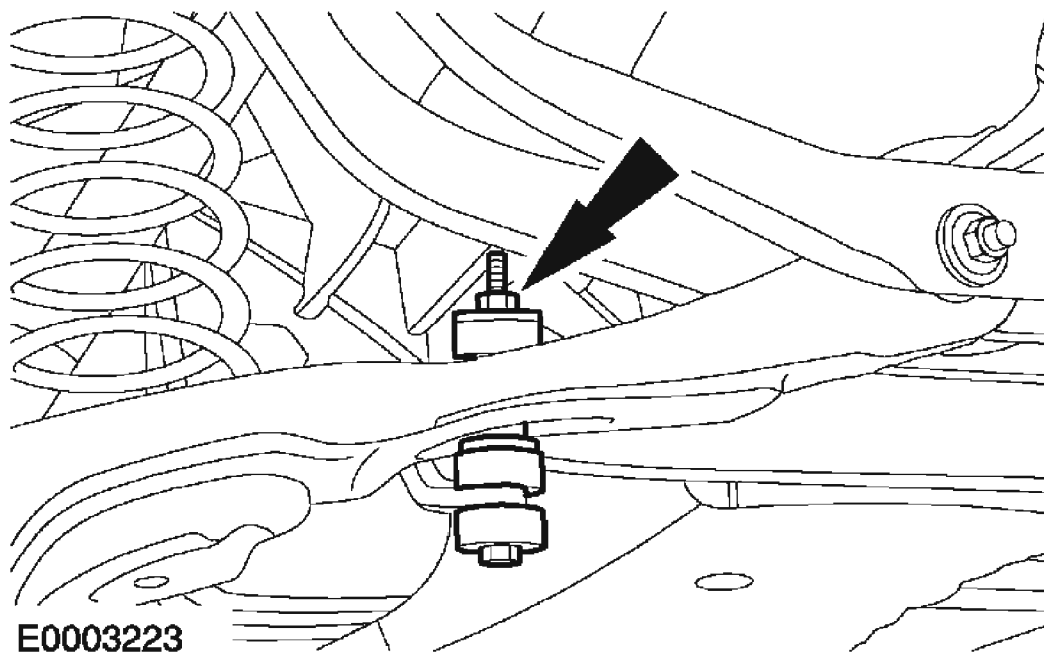


Fig. 32: Detaching Stabilizer Bar From Rear Lower Arm
Courtesy of FORD MOTOR CO.

5. Remove the rear lower arm.

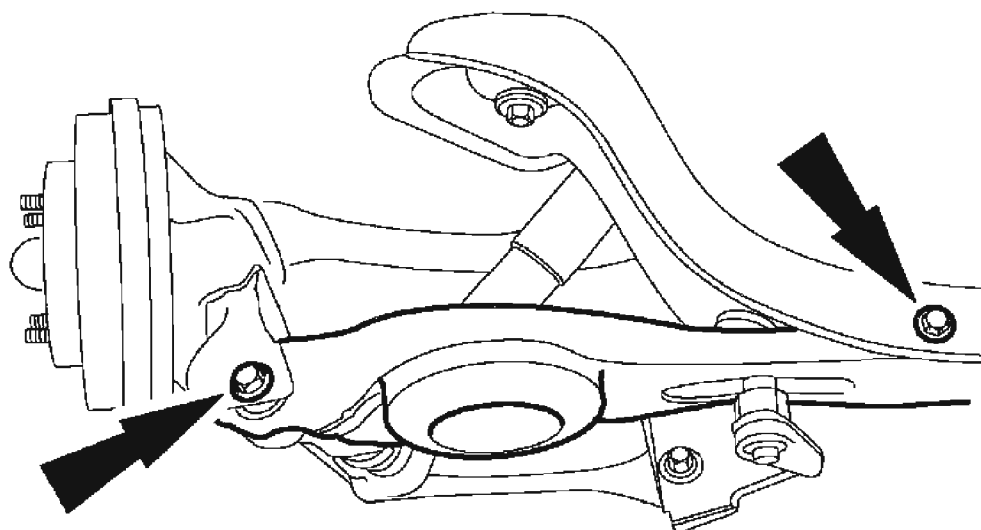


Fig. 33: Removing Rear Lower Arm

Courtesy of FORD MOTOR CO.

Installation

All vehicles

NOTE: Align the mark on the rear lower arm adjustment cam to the mark on the crossmember.

NOTE: Do not fully tighten the rear lower arm-to-wheel knuckle bolt at this stage.

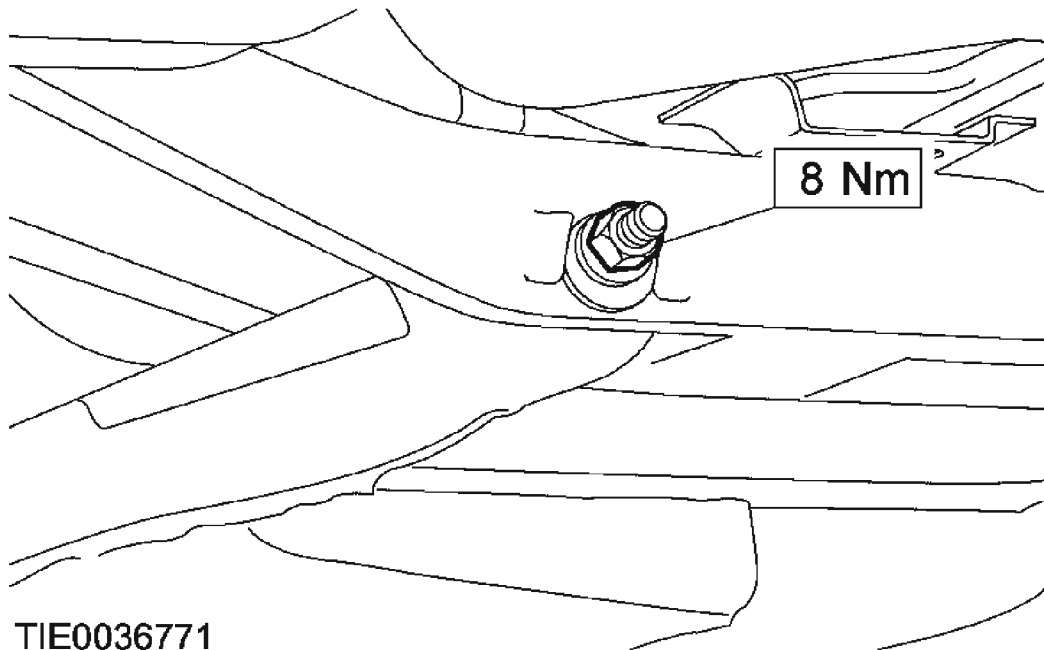
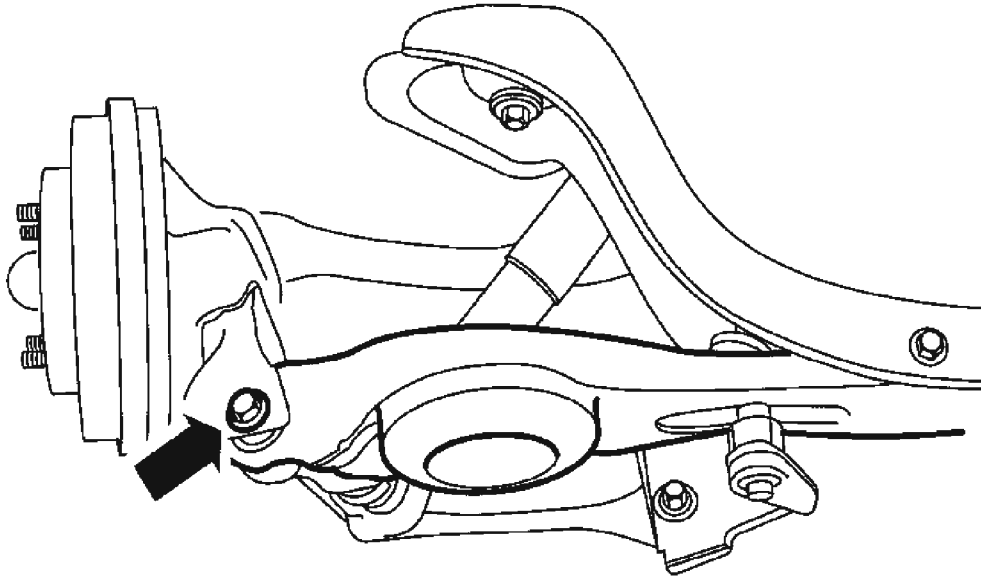


Fig. 34: Installing Rear Lower Arm
Courtesy of FORD MOTOR CO.

1. Install the rear lower arm.

3-door, 4-door and 5-door

NOTE: Do not fully tighten the rear lower arm-to-wheel knuckle retaining bolt at this stage.



TIE45829

Fig. 35: Identifying Rear Lower Arm-To-Wheel Knuckle Retaining Bolt
Courtesy of FORD MOTOR CO.

2. Install the rear lower arm-to-wheel knuckle retaining bolt.
3. Attach the stabilizer bar to the rear lower arm.

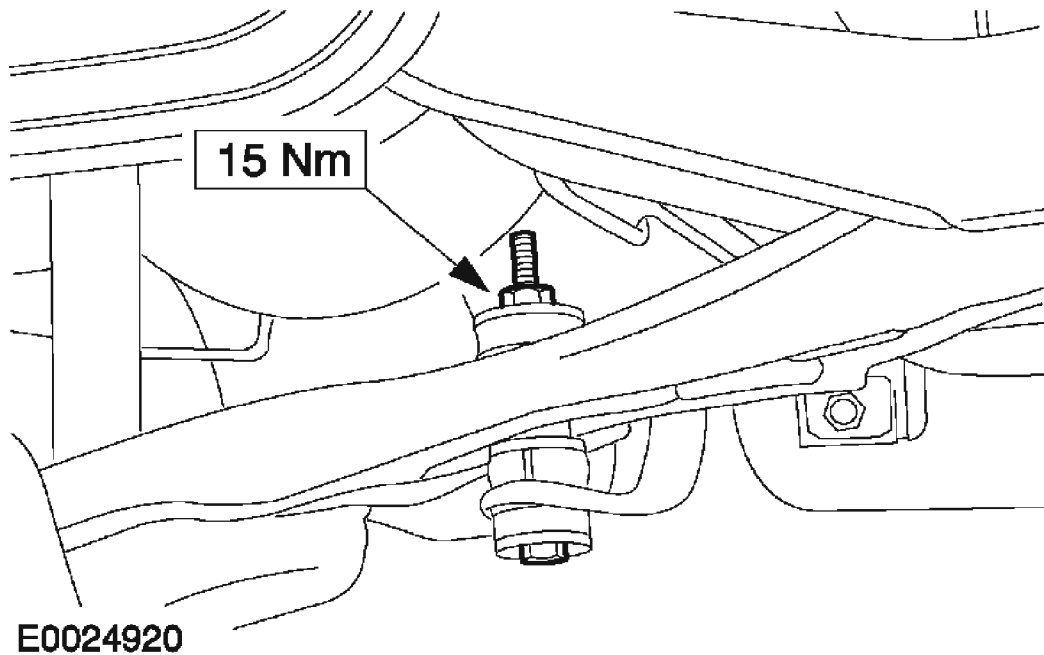
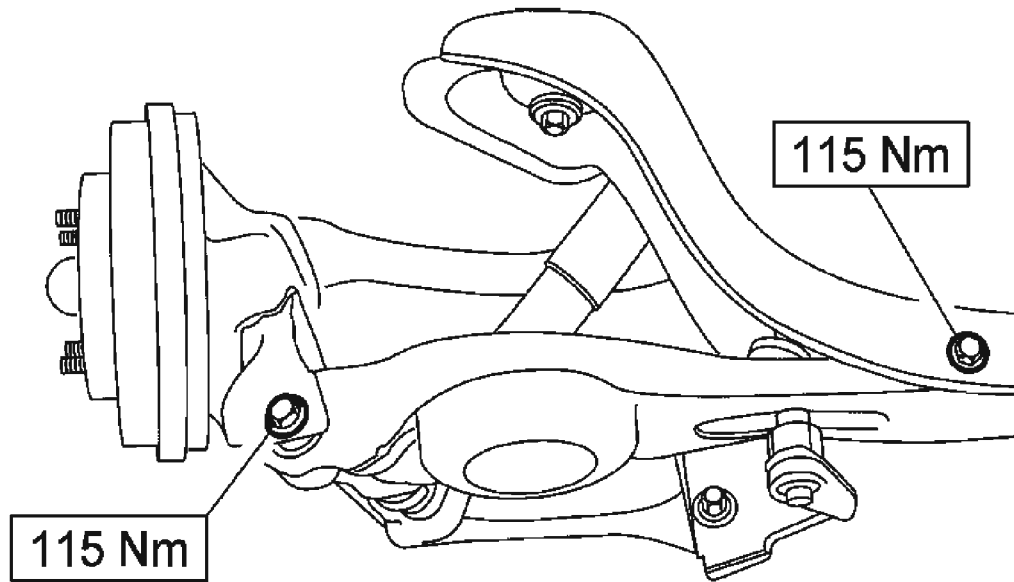


Fig. 36: Attaching Stabilizer Bar To Rear Lower Arm
Courtesy of FORD MOTOR CO.

4. Install the spring. For additional information, refer to **SPRING**, **SPRING - 3-DOOR/4-DOOR** or **SPRING - WAGON**.

NOTE: Final tightening of the rear suspension components should be carried out at or near the curb height setting. Load the suspension to achieve this.



TIE45808

Fig. 37: Identifying Rear Lower Arm Adjustment Cam Nuts And Rear Lower Arm-To-Wheel Knuckle Retaining Bolts & Torque Specifications
Courtesy of FORD MOTOR CO.

5. Tighten the rear lower arm adjustment cam nut and rear lower arm-to-wheel knuckle retaining bolts.

Wagon

6. Install the spring. For additional information, refer to Spring - Wagon.

NOTE: Final tightening of the rear suspension components should be carried out at or near the curb height setting. Load the suspension to achieve this.

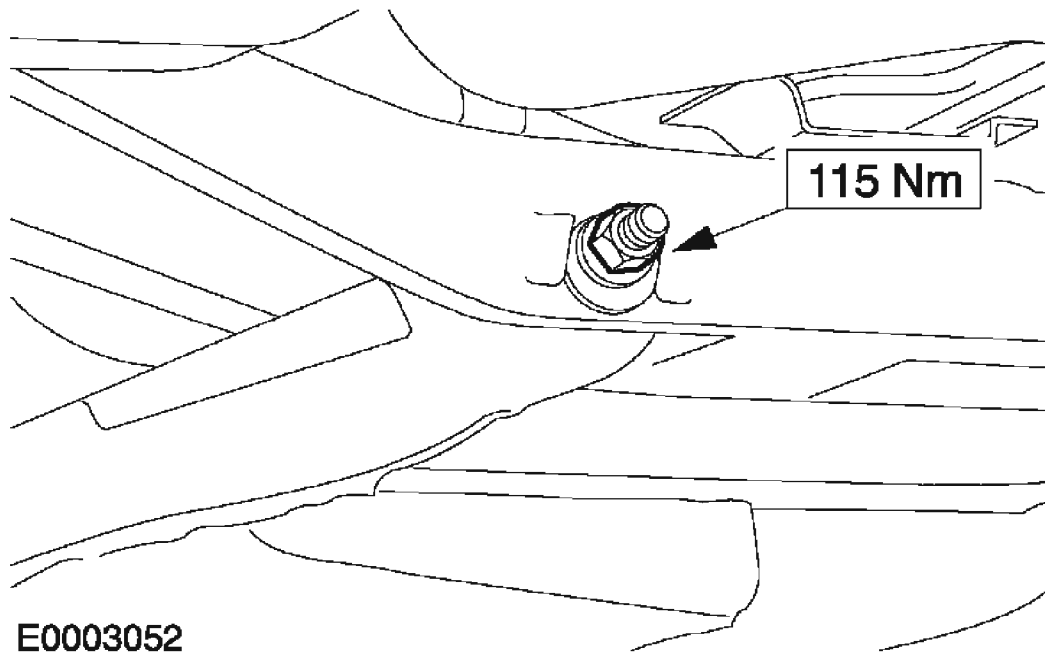


Fig. 38: Tightening Rear Lower Arm Adjustment Cam Nut
Courtesy of FORD MOTOR CO.

7. Tighten the rear lower arm adjustment cam nut.

All vehicles

8. Check the toe setting and adjust as necessary. For additional information, refer to **SPECIFICATIONS** and **REAR TOE ADJUSTMENT** .

UPPER ARM

Removal

All vehicles

1. Remove the rear wheel and tire. For additional information, refer to **WHEELS AND TIRES** .

NOTE: **Wagon shown, 3-door, 4-door and 5-door similar.**

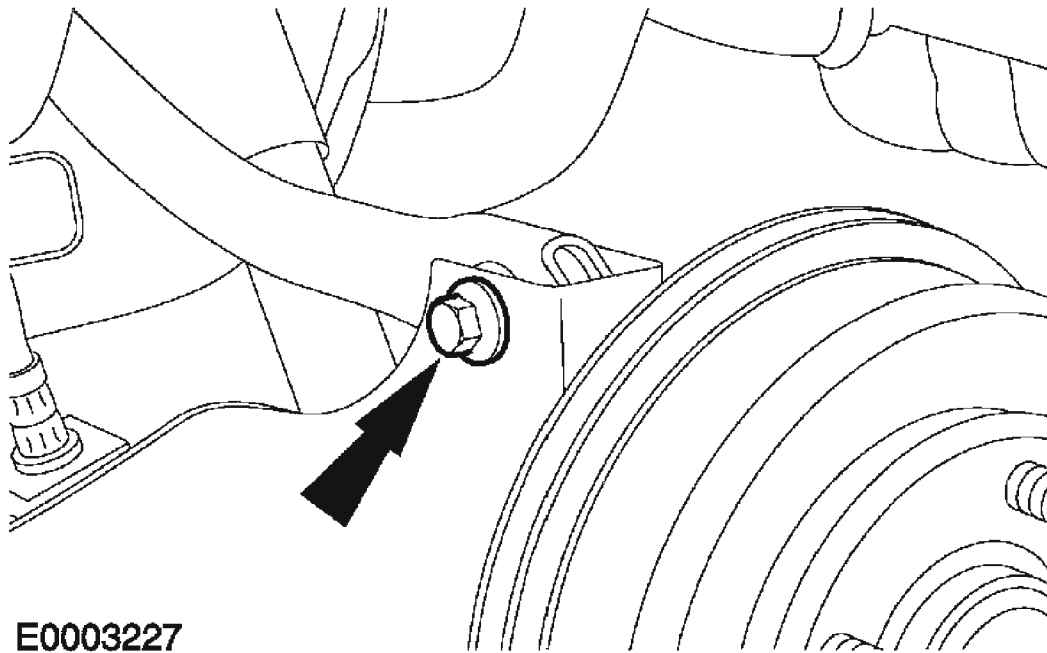
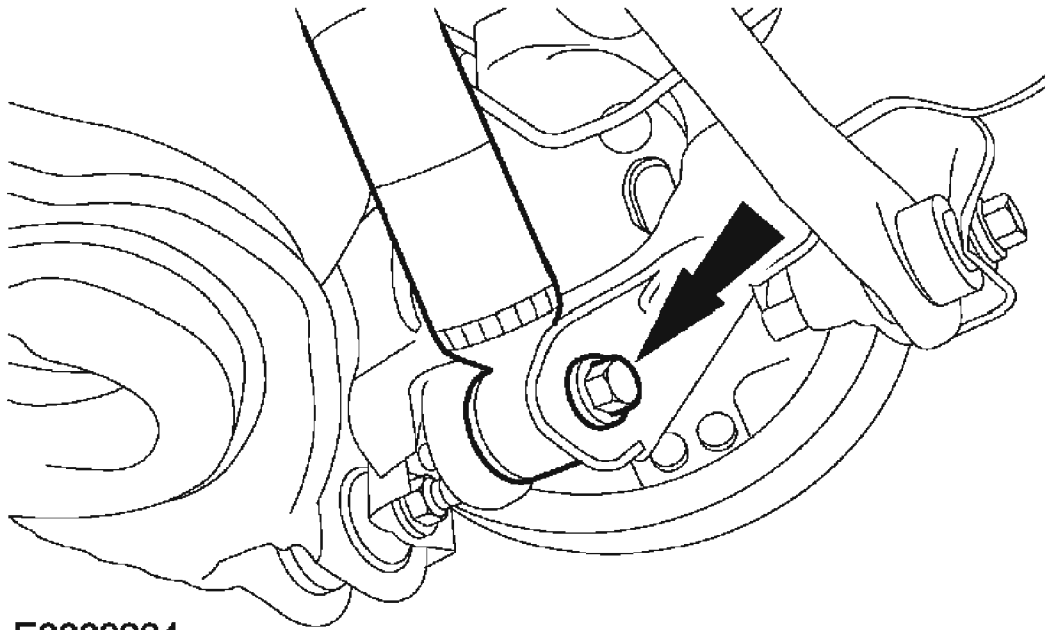


Fig. 39: Detaching Upper Arm From Wheel Knuckle
Courtesy of FORD MOTOR CO.

2. Detach the upper arm from the wheel knuckle.

Wagon

3. Detach the shock absorber from the wheel knuckle and position it aside.



E0003234

Fig. 40: Detaching Shock Absorber From Wheel Knuckle
Courtesy of FORD MOTOR CO.

All vehicles

NOTE: Make a note of the position of the upper arm to aid installation.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.

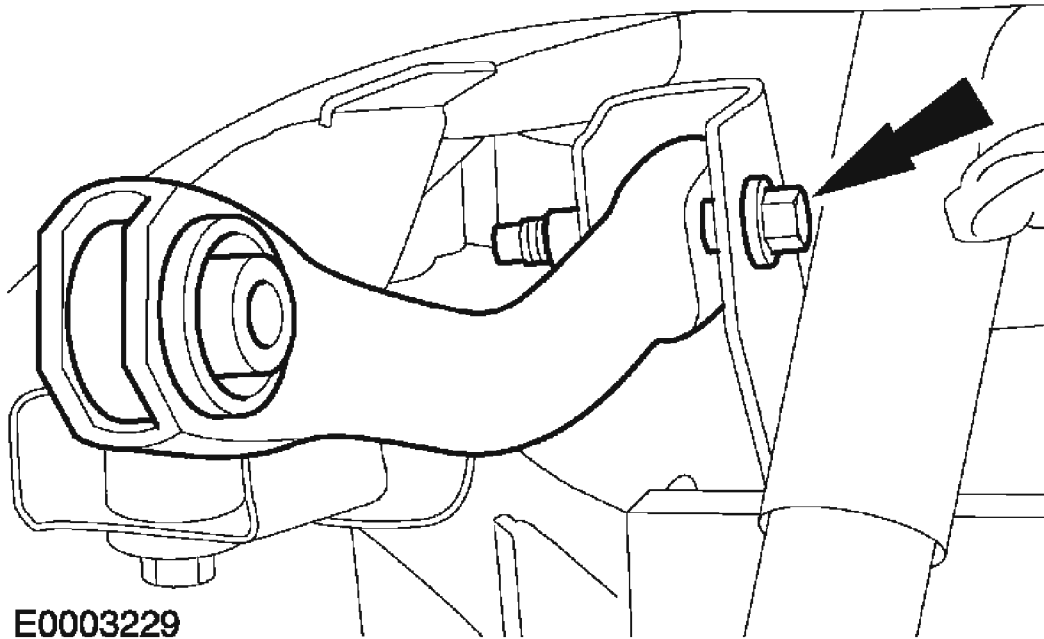


Fig. 41: Removing Upper Arm
Courtesy of FORD MOTOR CO.

4. Remove the upper arm.

Installation

NOTE: Final tightening of the rear suspension components should be carried out at the design height setting. Load the suspension to achieve this.

All vehicles

NOTE: Do not fully tighten the upper arm-to-wheel knuckle retaining bolt at this stage.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.

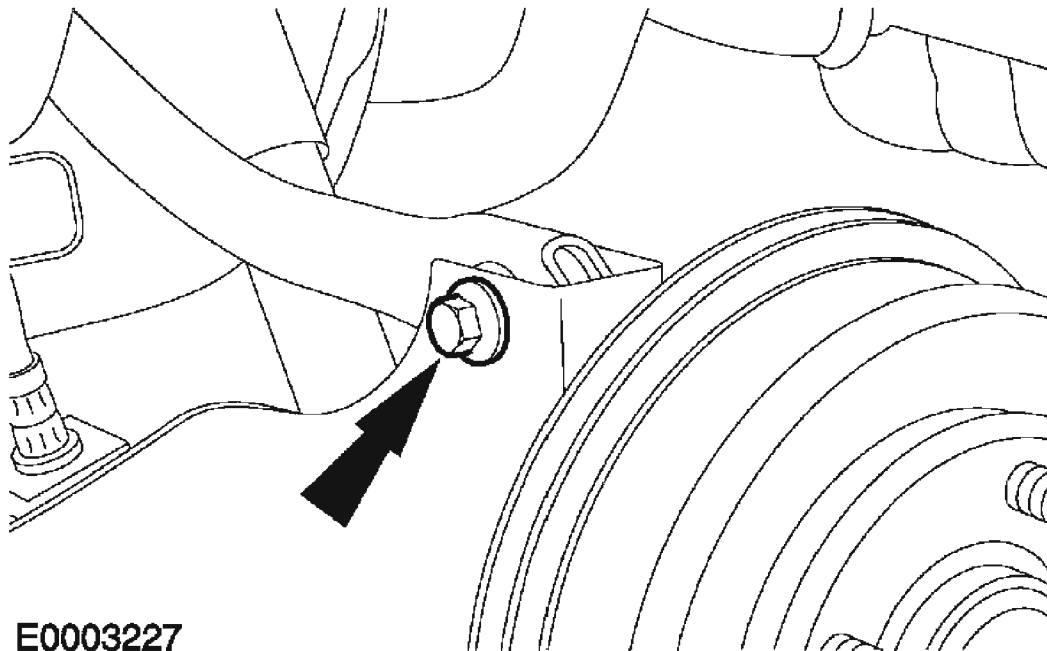


Fig. 42: Attaching Upper Arm To Wheel Knuckle
Courtesy of FORD MOTOR CO.

1. Attach the upper arm to the wheel knuckle.

NOTE: Do not fully tighten the upper arm retaining bolt at this stage.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.

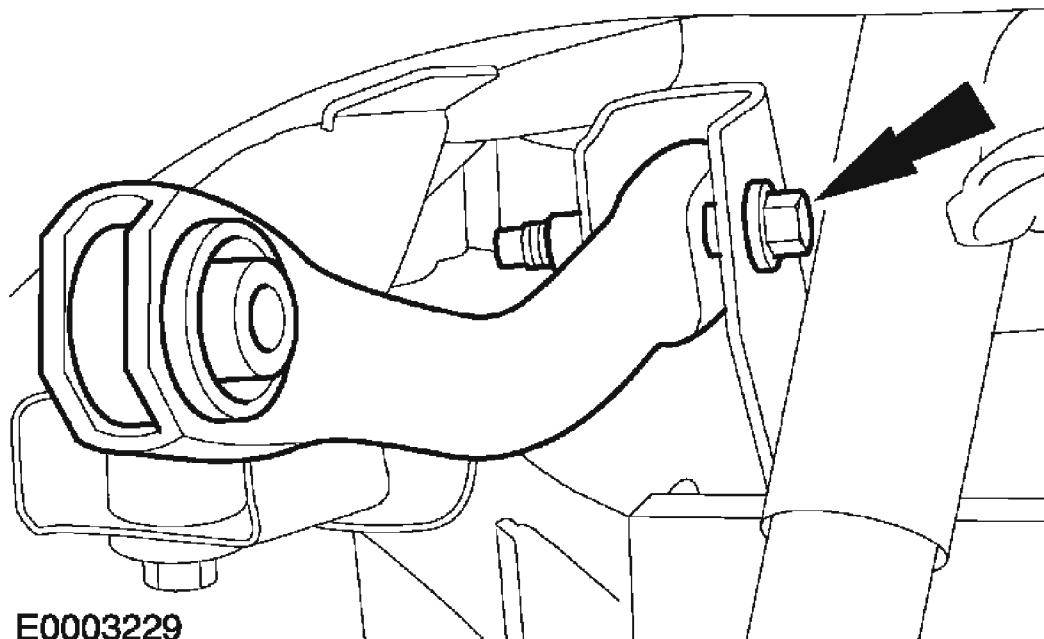
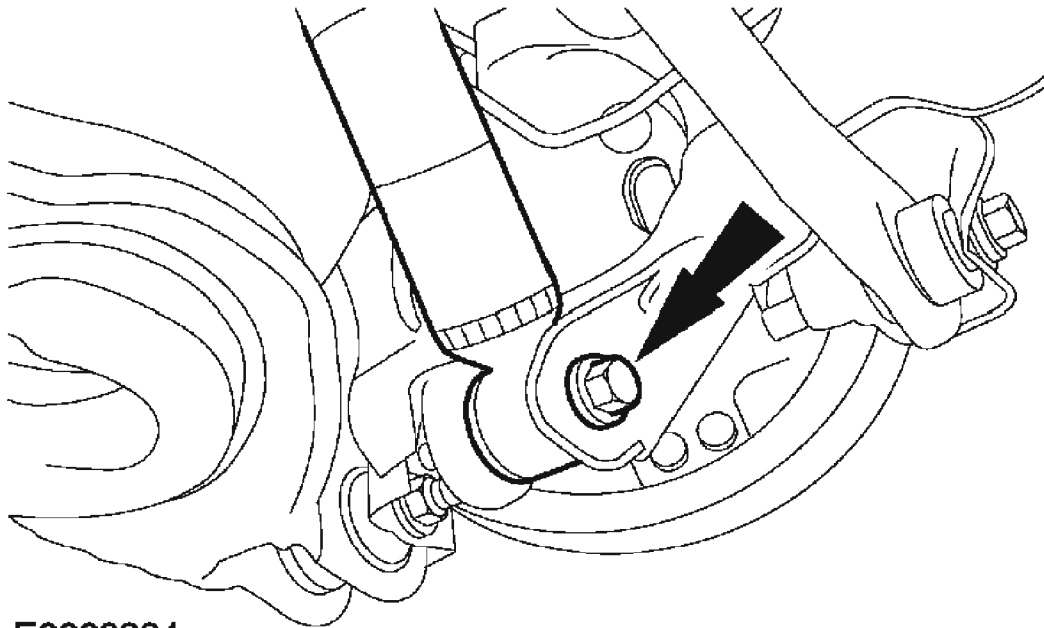


Fig. 43: Installing Upper Arm
Courtesy of FORD MOTOR CO.

2. Install the upper arm.

Wagon

NOTE: Do not fully tighten the shock absorber-to-wheel knuckle retaining bolt at this stage.



E0003234

Fig. 44: Attaching Shock Absorber To Wheel Knuckle
Courtesy of FORD MOTOR CO.

3. Attach the shock absorber to the wheel knuckle.

All vehicles

4. Install the wheel and tire. For additional information, refer to **WHEELS AND TIRES** .

NOTE: **Wagon shown, 3-door, 4-door and 5-door similar.**

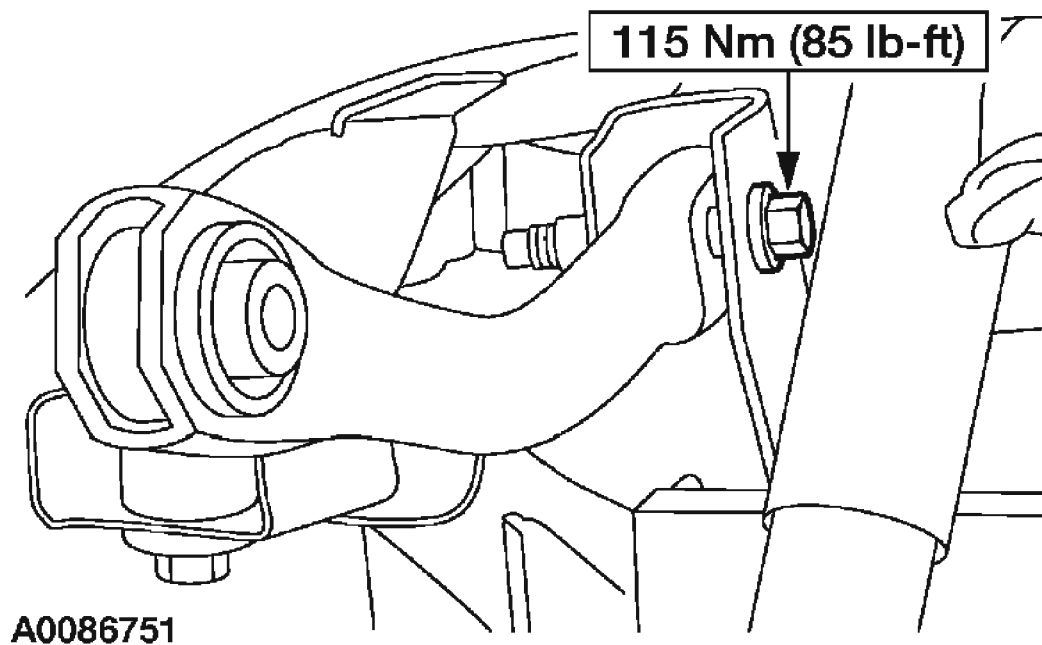


Fig. 45: Tightening Upper Arm Retaining Bolt
Courtesy of FORD MOTOR CO.

5. Tighten the upper arm retaining bolt.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.

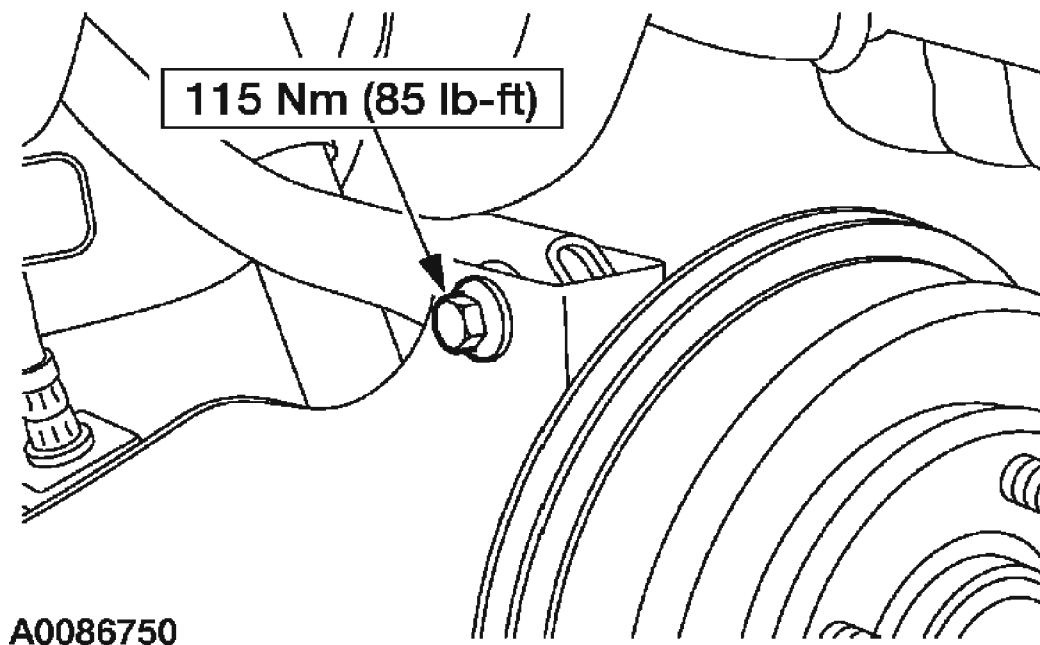


Fig. 46: Tightening Upper Arm-To-Wheel Knuckle Retaining Bolt
Courtesy of FORD MOTOR CO.

6. Tighten the upper arm-to-wheel knuckle retaining bolt.

Wagon

7. Tighten the shock absorber to wheel knuckle retaining bolt.

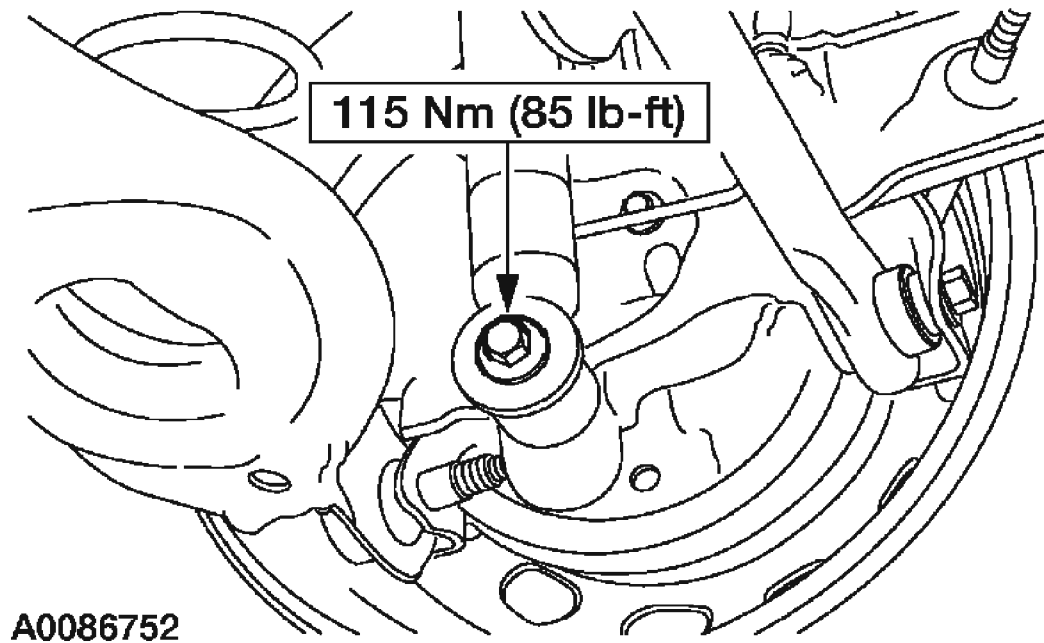


Fig. 47: Tightening Shock Absorber To Wheel Knuckle Retaining Bolt
Courtesy of FORD MOTOR CO.

STABILIZER BAR

Removal

NOTE: This procedure must be carried out with the vehicle at or near the curb height setting. Load the suspension to achieve this.

NOTE: If this procedure is to be carried out on a twin post hoist, support the lower arm on both sides.

1. With the vehicle in NEUTRAL, position it on a noise. Raise and support the vehicle. For additional information, refer to **JACKING AND LIFTING** .
2. Detach the stabilizer bar from the rear lower arm.

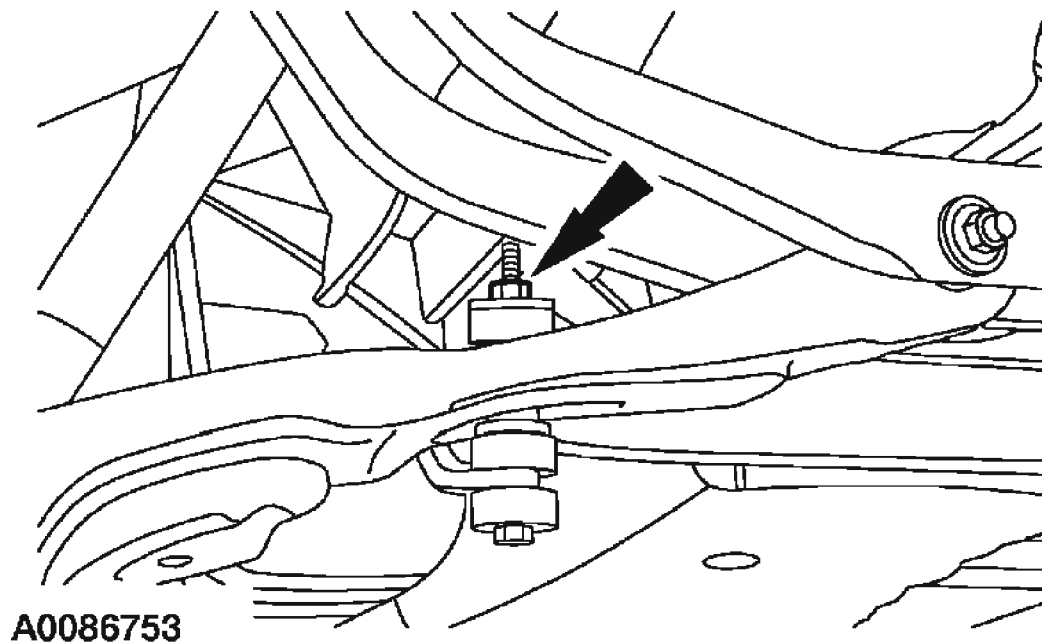


Fig. 48: Detaching Stabilizer Bar From Rear Lower Arm
Courtesy of FORD MOTOR CO.

3. Remove the stabilizer bar (two bolts each side).
 1. Remove the stabilizer bar clamp retaining bolts.
 2. Remove the clamps.
 3. Remove the stabilizer bar.
 4. Remove the bushings.

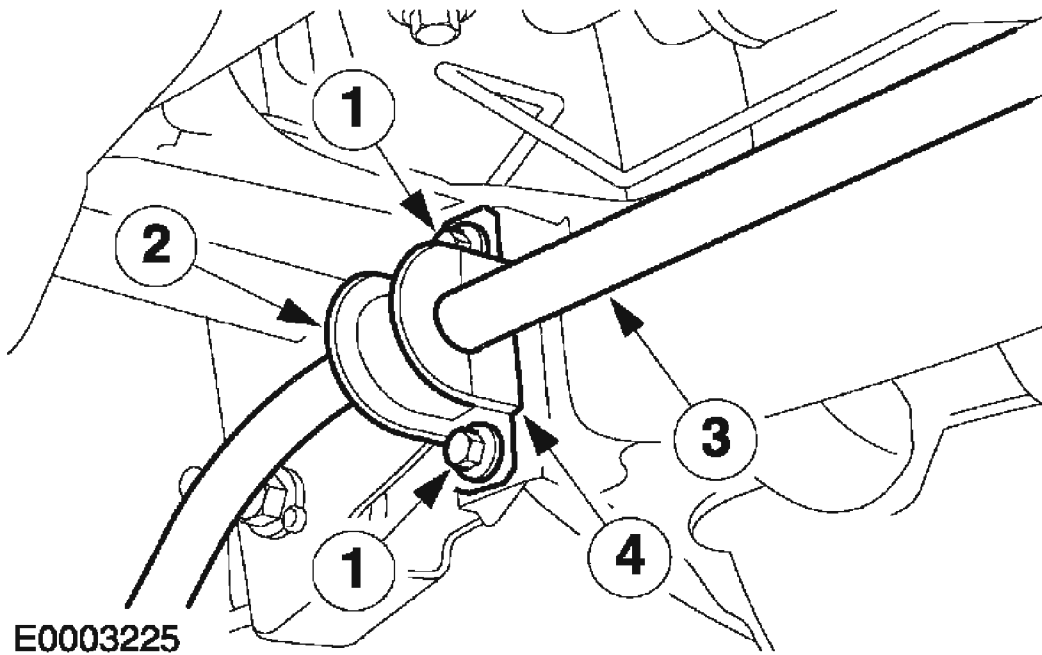


Fig. 49: Removing Stabilizer Bar
Courtesy of FORD MOTOR CO.

Installation

CAUTION: The stabilizer bar bushings must be located correctly on the stabilizer bar, with no lubricant.

NOTE: Make sure the bushing nipple is on the LH side.

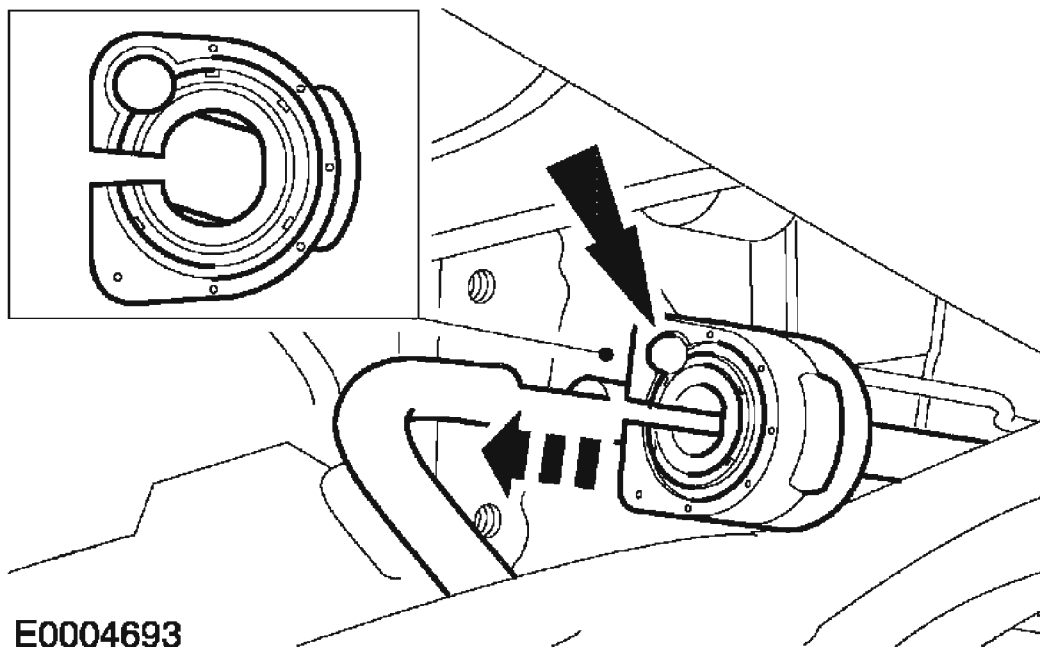
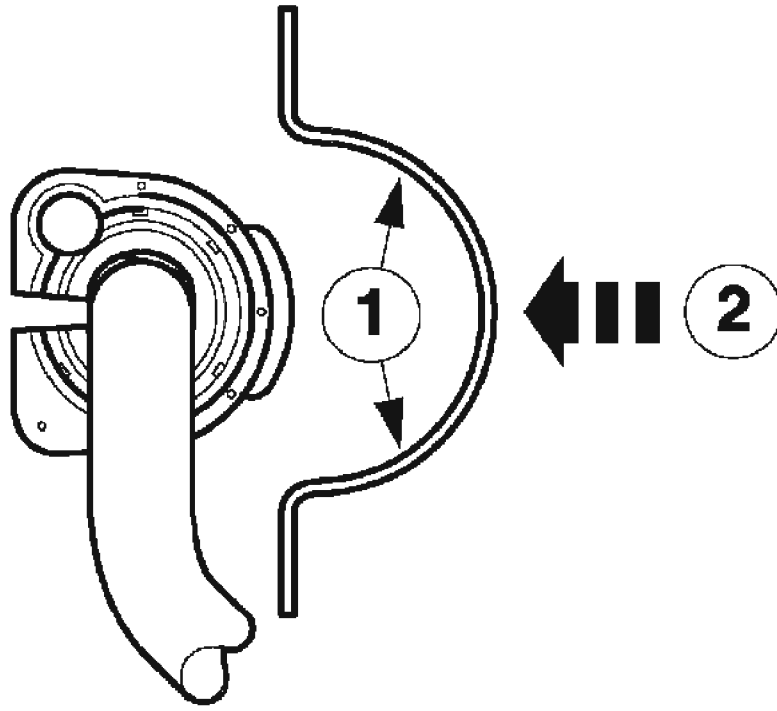


Fig. 50: Installing Bushings Onto Stabilizer Bar
Courtesy of FORD MOTOR CO.

1. Install the bushings onto the stabilizer bar.
2. Install the stabilizer bar clamps onto the stabilizer bar.
 1. Apply water to the clamps to assist installation.
 2. Press the clamps onto the bushings.



E0004694

Fig. 51: Installing Stabilizer Bar Clamps Onto Stabilizer Bar
Courtesy of FORD MOTOR CO.

3. Install the stabilizer bar (two bolts each side).

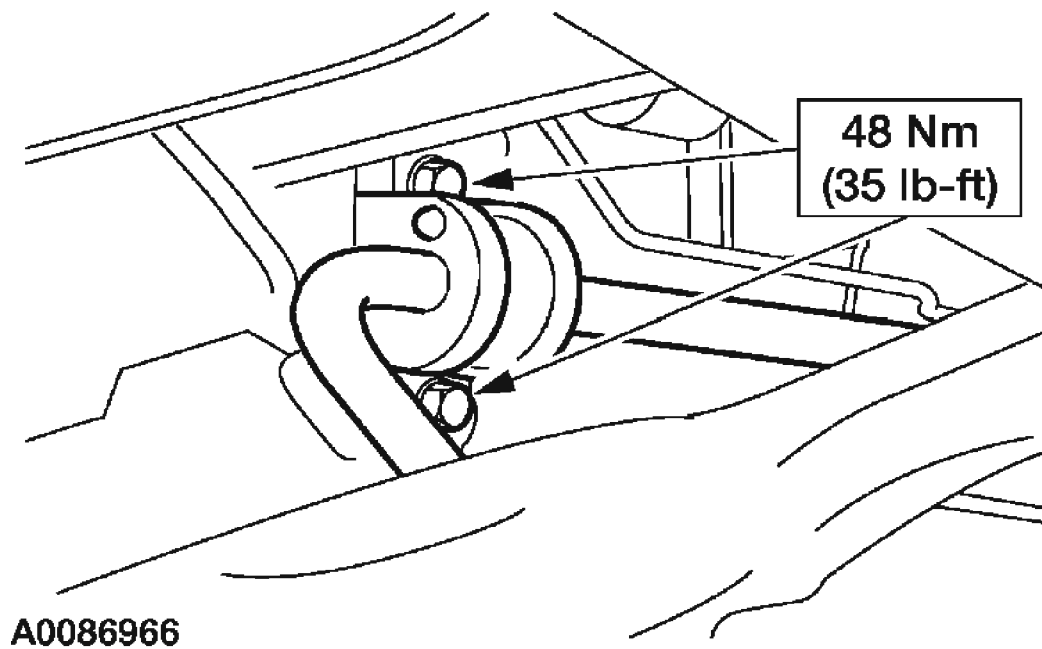


Fig. 52: Installing Stabilizer Bar
Courtesy of FORD MOTOR CO.

4. Attach the stabilizer bar to the rear lower arms.

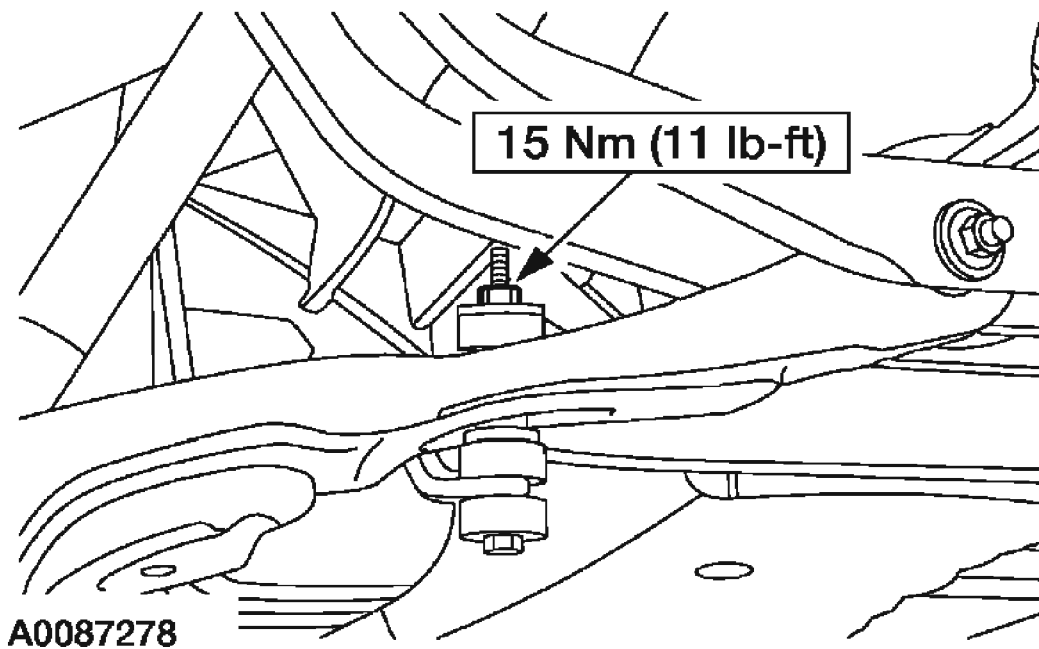


Fig. 53: Attaching Stabilizer Bar To Rear Lower Arms
Courtesy of FORD MOTOR CO.

WHEEL KNUCKLE

Removal

Vehicles with rear disc brakes

1. Remove the brake disc shield. For additional information, refer to **REAR DISC BRAKE** .

Vehicles with rear drum brakes

2. Remove the brake drum. For additional information, refer to **DRUM BRAKE** .

All vehicles

3. Disconnect the rear brake hose.
 1. Using a suitable clamp, clamp the brake hose.
 2. Disconnect the brake tube union.
 3. Remove the clip.

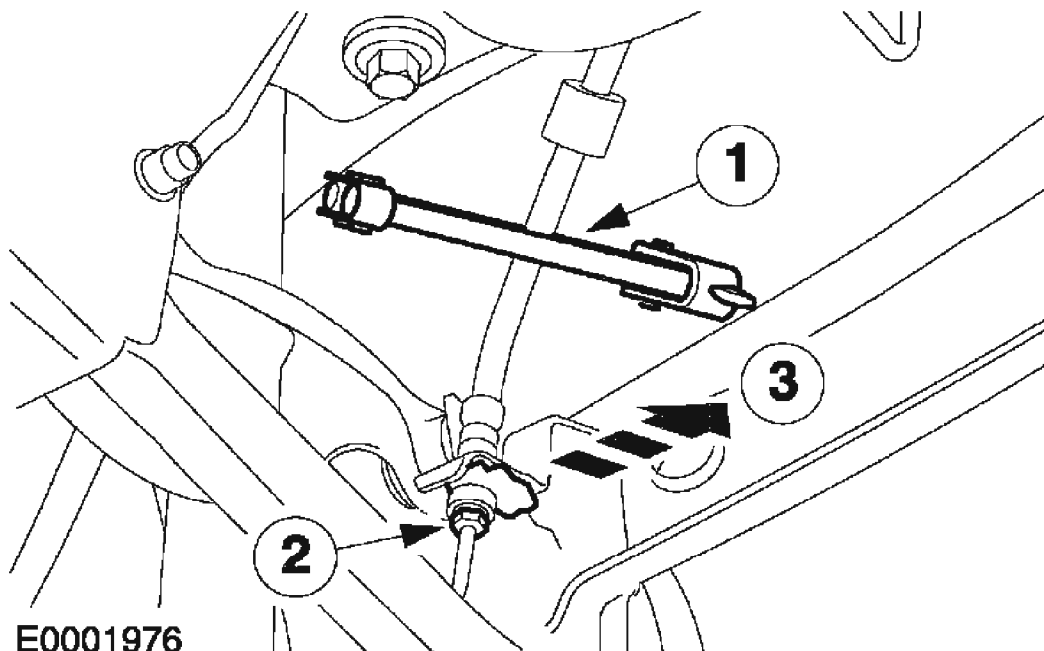


Fig. 54: Disconnecting Rear Brake Hose
Courtesy of FORD MOTOR CO.

4. Detach the parking brake cable from the wheel knuckle.

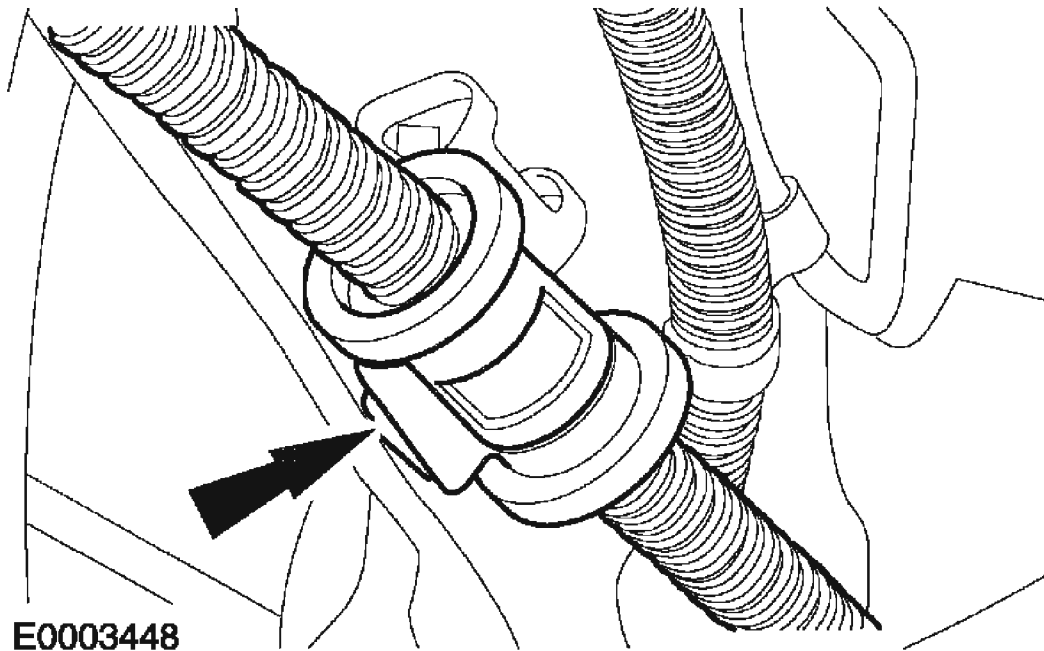


Fig. 55: Detaching Parking Brake Cable From Wheel Knuckle
Courtesy of FORD MOTOR CO.

5. Remove the rear spring. For additional information, refer to **SPRING**, **SPRING - 3-DOOR/4-DOOR** or **SPRING - WAGON**.

Wagon

6. Detach the shock absorber from the wheel knuckle.

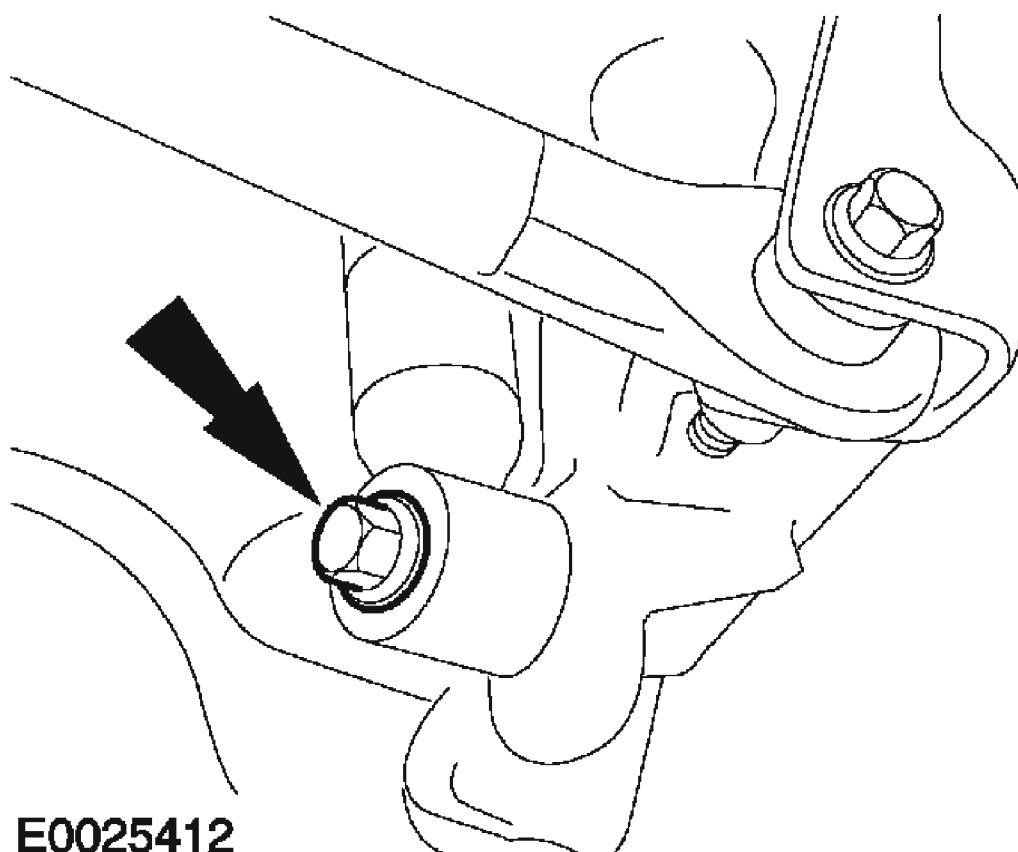


Fig. 56: Detaching Shock Absorber From Wheel Knuckle
Courtesy of FORD MOTOR CO.

All vehicles

7. Detach the front lower arm from the wheel knuckle.

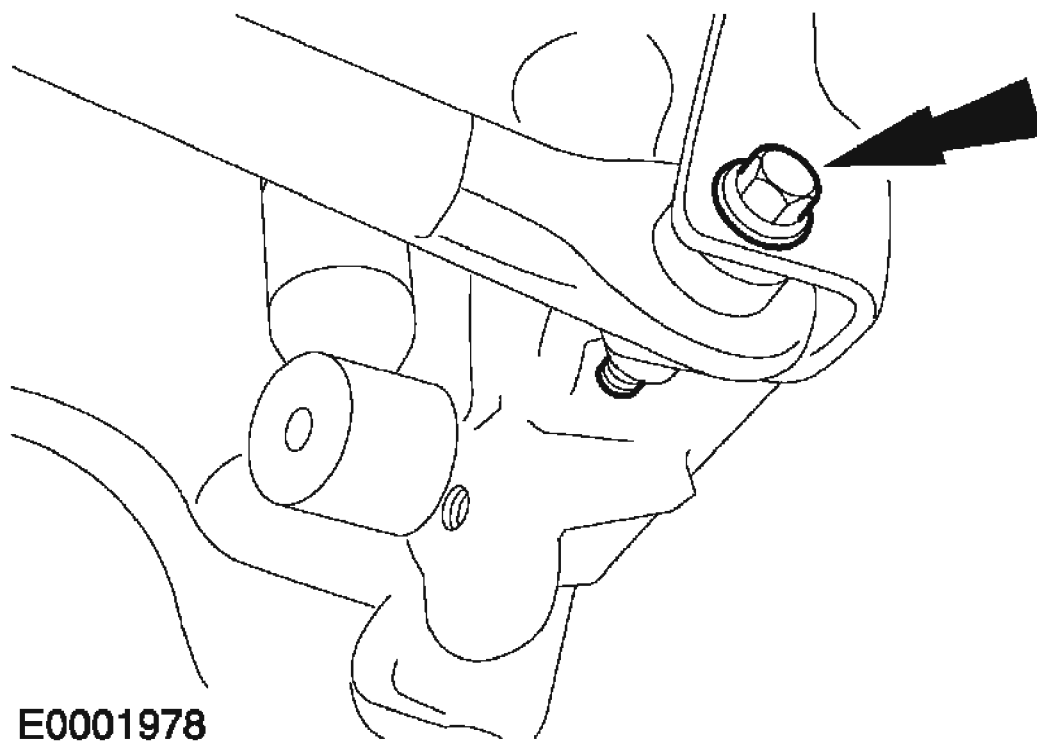
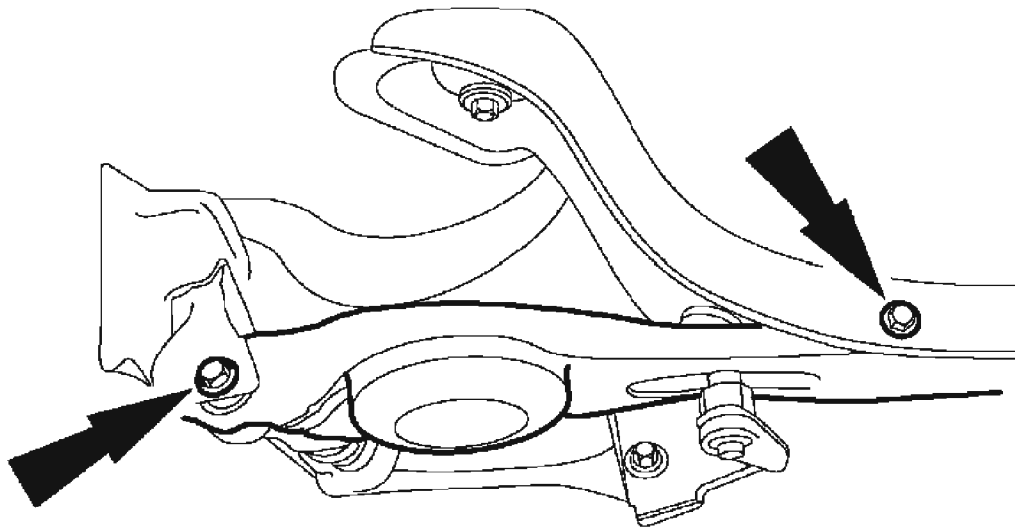


Fig. 57: Detaching Front Lower Arm From Wheel Knuckle
Courtesy of FORD MOTOR CO.

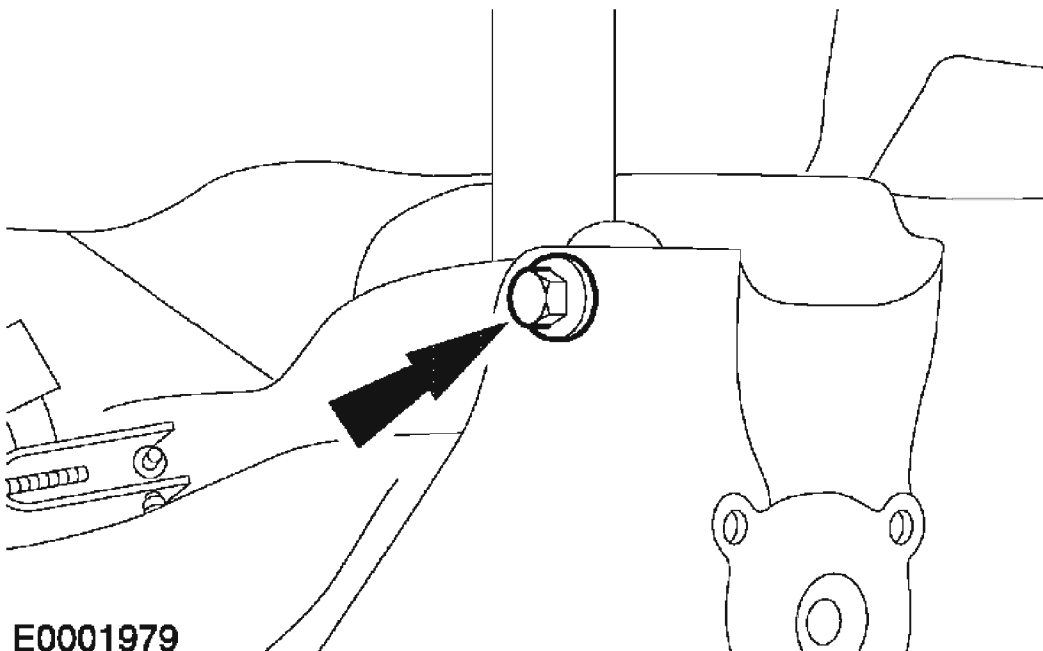
8. Remove the rear lower arm retaining bolts.



E0025413

Fig. 58: Removing Rear Lower Arm Retaining Bolts
Courtesy of FORD MOTOR CO.

9. Detach the upper arm from the wheel knuckle.



E0001979

Fig. 59: Detaching Upper Arm From Wheel Knuckle

Courtesy of FORD MOTOR CO.

10. Remove the wheel knuckle.

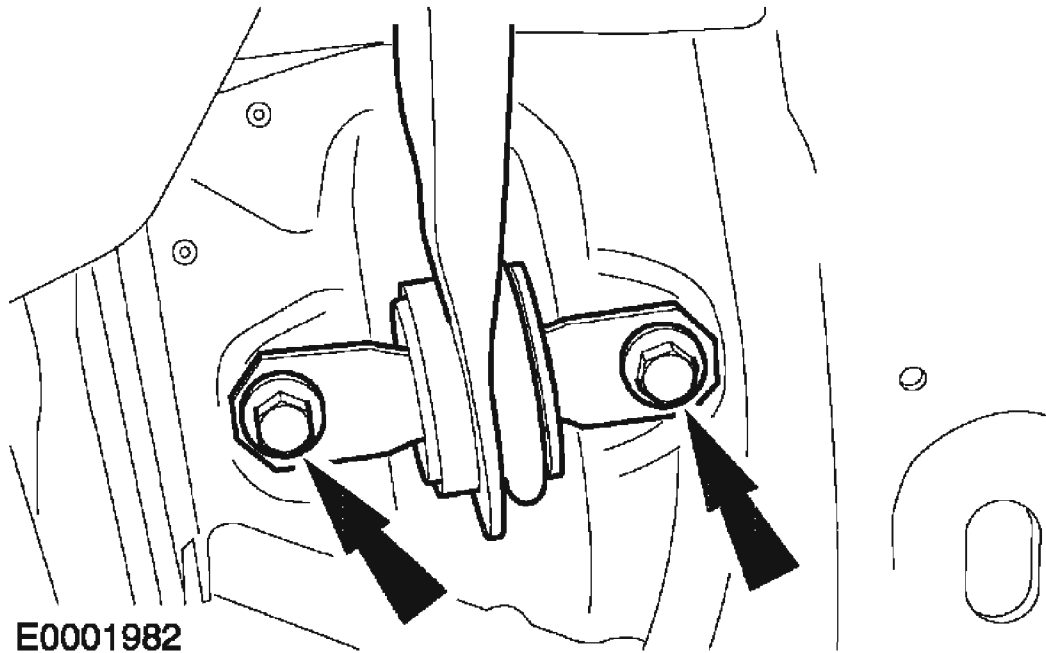


Fig. 60: Removing Wheel Knuckle
Courtesy of FORD MOTOR CO.

Installation

NOTE: Final tightening of the rear suspension should be carried out at the design height setting.

All vehicles

NOTE: Do not fully tighten the wheel knuckle retaining bolts at this stage.

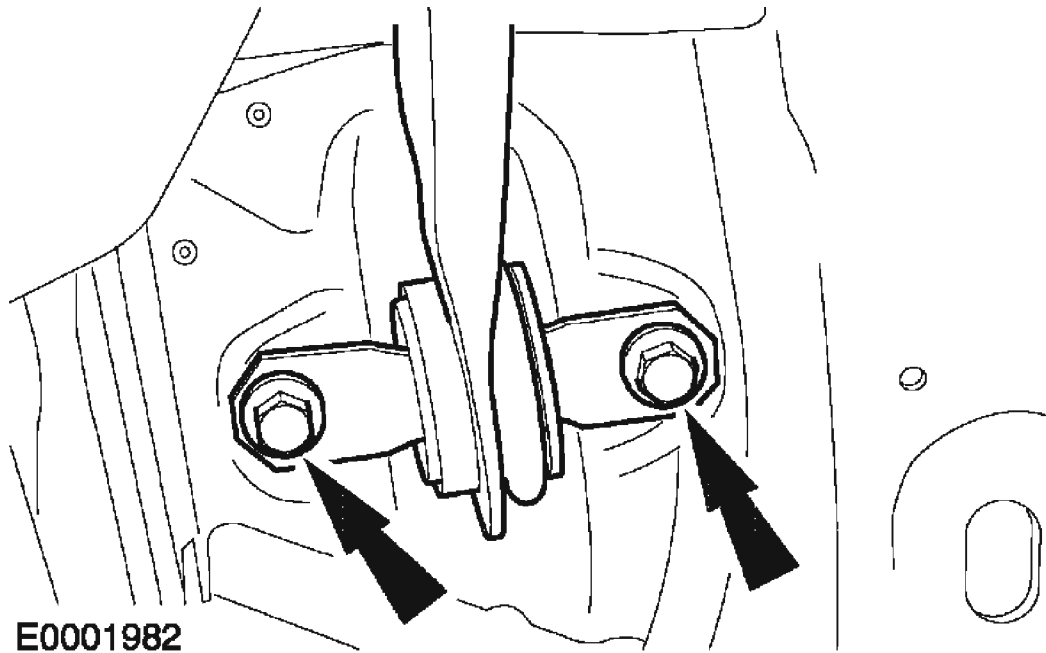


Fig. 61: Installing Wheel Knuckle
Courtesy of FORD MOTOR CO.

1. Install the wheel knuckle.

NOTE: Do not fully tighten the upper arm to wheel knuckle retaining bolt at this stage.

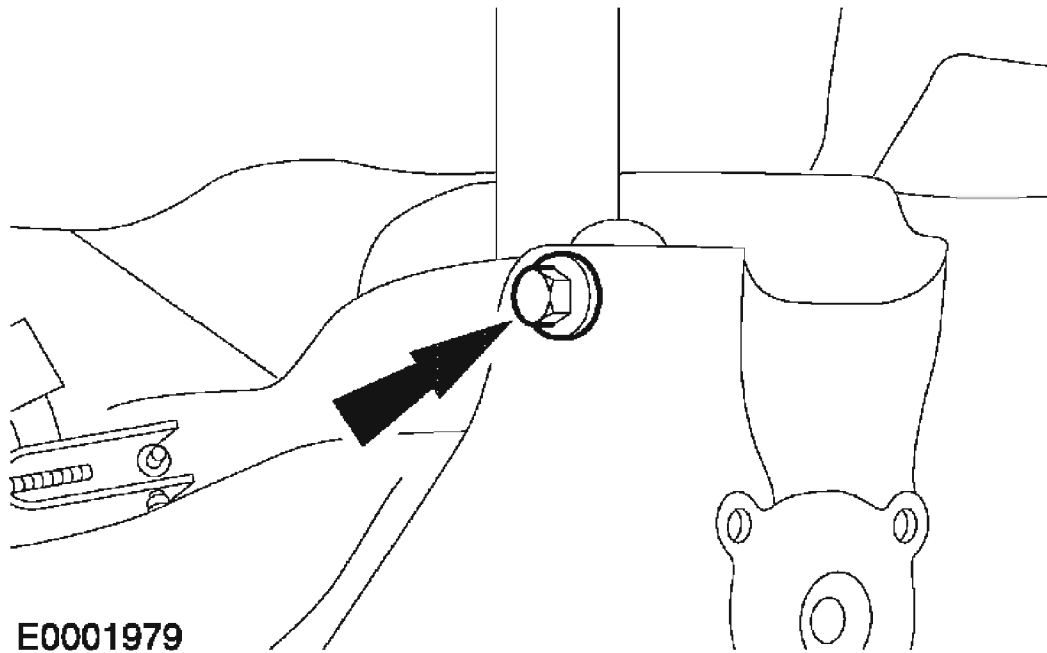
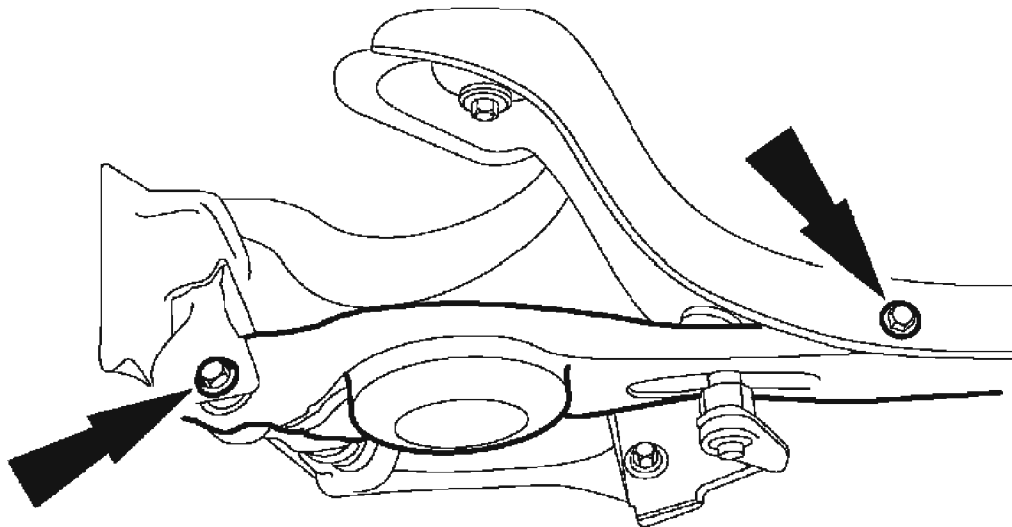


Fig. 62: Attaching Upper Arm To Wheel Knuckle
Courtesy of FORD MOTOR CO.

2. Attach the upper arm to the wheel knuckle.

NOTE: Do not fully tighten the rear lower arm retaining bolts at this stage.



E0025413

Fig. 63: Installing Rear Lower Arm Retaining Bolts
Courtesy of FORD MOTOR CO.

3. Install the rear lower arm retaining bolts.

NOTE: Do not fully tighten the rear lower arm retaining bolts at this stage.

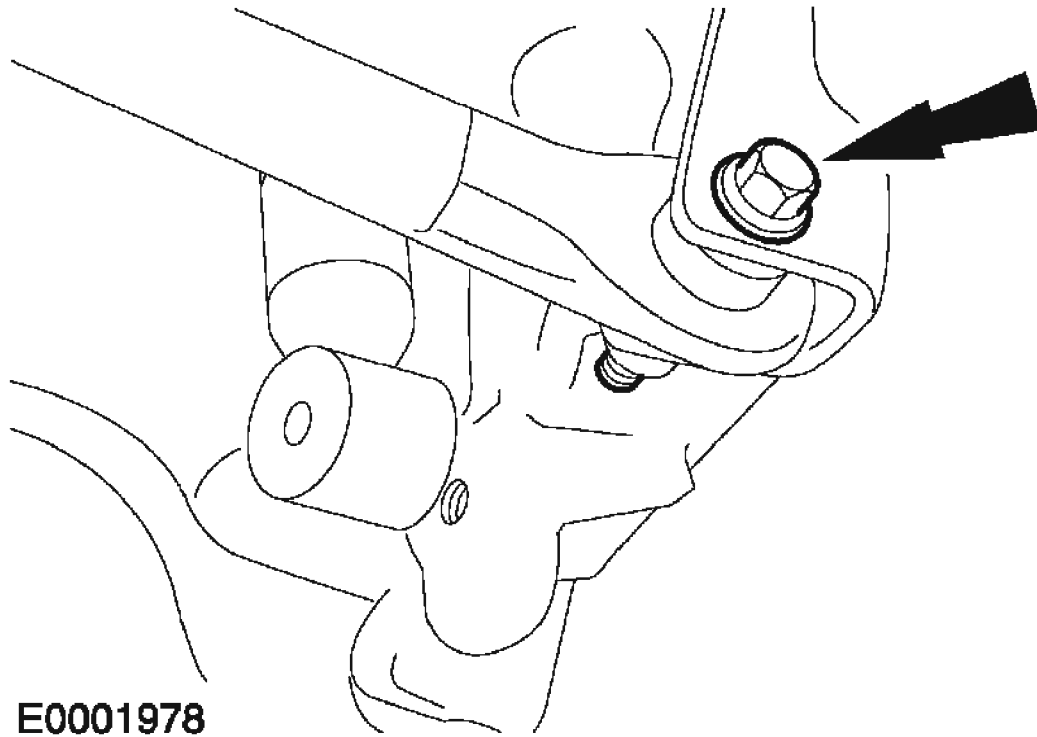


Fig. 64: Attaching Front Lower Arm To Wheel Knuckle
Courtesy of FORD MOTOR CO.

4. Attach the front lower arm to the wheel knuckle.

Wagon

NOTE: Do not fully tighten the rear lower arm retaining bolts at this stage.

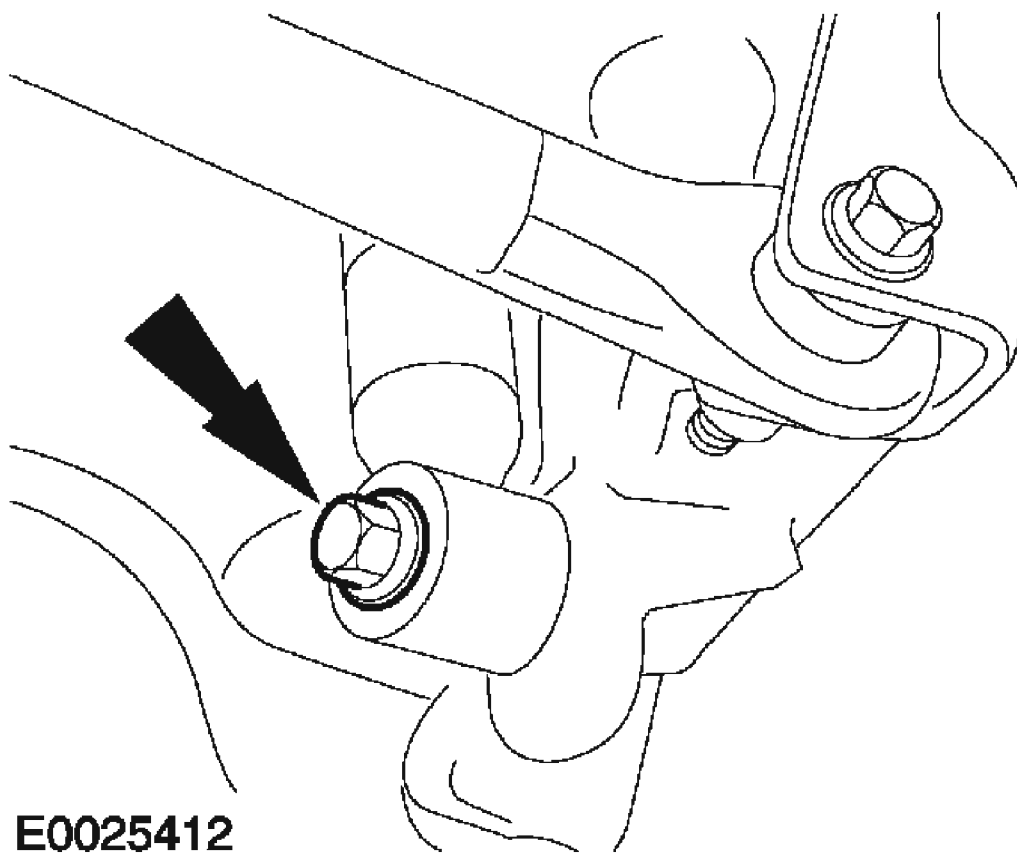


Fig. 65: Attaching Shock Absorber To Wheel Knuckle
Courtesy of FORD MOTOR CO.

5. Attach the shock absorber to the wheel knuckle.

All vehicles

6. Install the spring. For additional information, refer to **SPRING** or **SPRING - 3-DOOR/4-DOOR** or **SPRING - WAGON**.
7. Tighten the wheel knuckle retaining bolts.

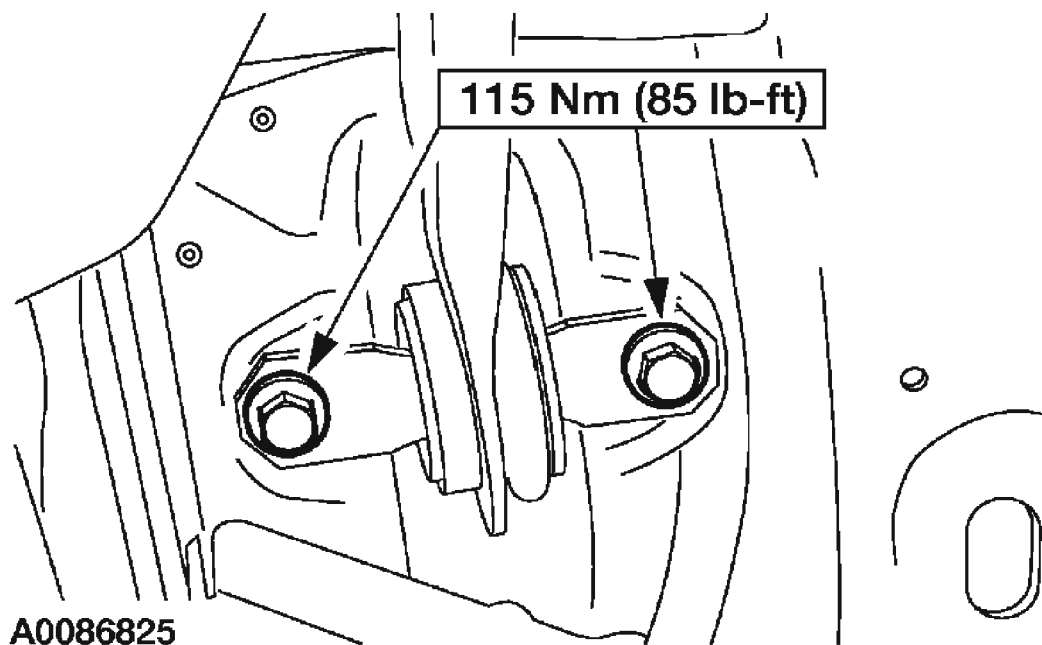


Fig. 66: Tightening Wheel Knuckle Retaining Bolts
Courtesy of FORD MOTOR CO.

8. Tighten the upper arm to wheel knuckle retaining bolt.

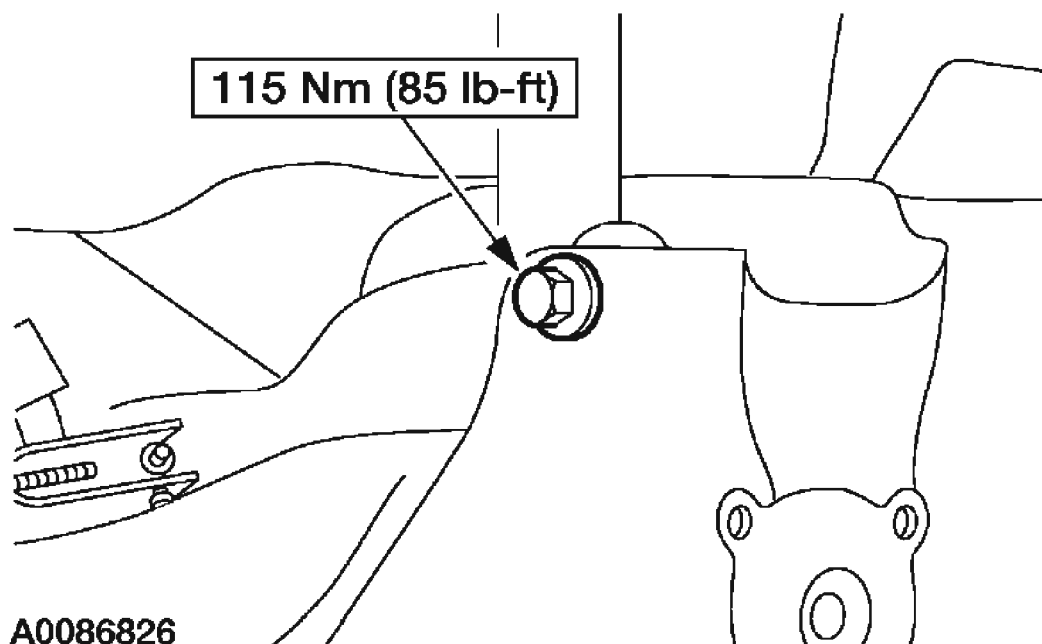
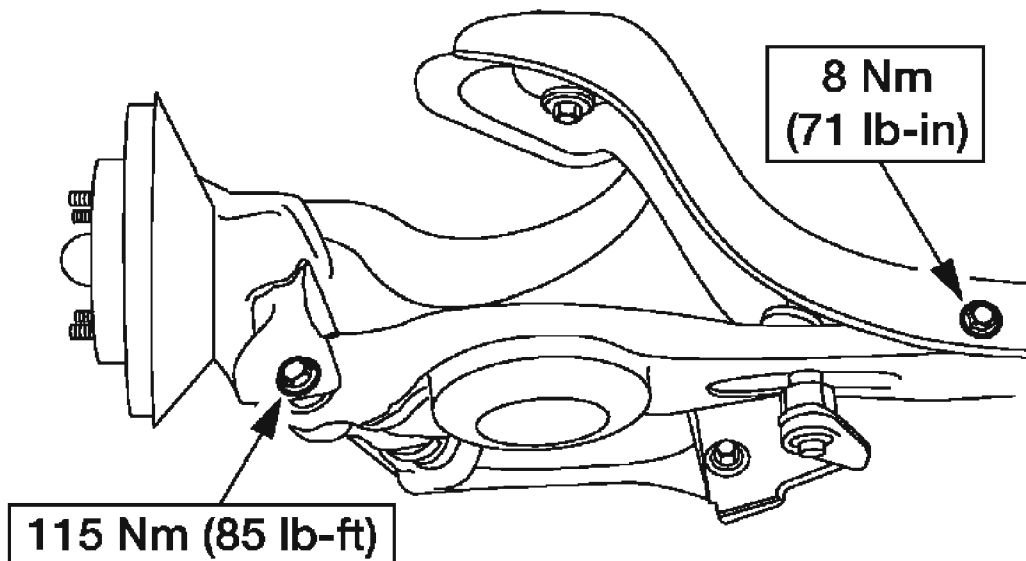


Fig. 67: Tightening Upper Arm To Wheel Knuckle Retaining Bolt
Courtesy of FORD MOTOR CO.

9. Tighten the rear lower arm retaining bolts.



A0086827

Fig. 68: Tightening Rear Lower Arm Retaining Bolts
Courtesy of FORD MOTOR CO.

10. Tighten the front lower arm to wheel knuckle retaining bolt.

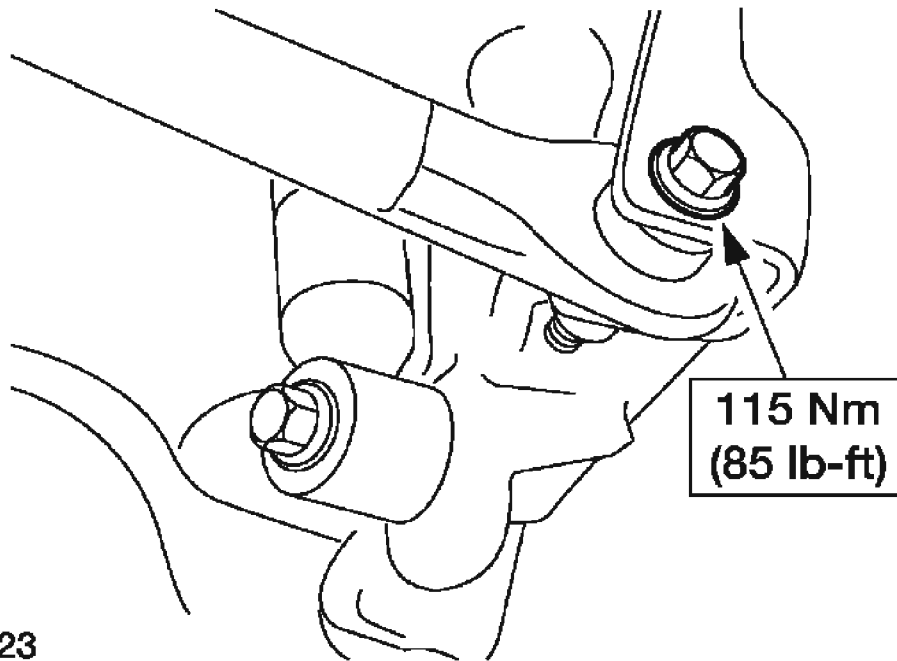


Fig. 69: Tightening Front Lower Arm To Wheel Knuckle Retaining Bolt
Courtesy of FORD MOTOR CO.

Wagon

11. Tighten the shock absorber to wheel knuckle retaining bolt.

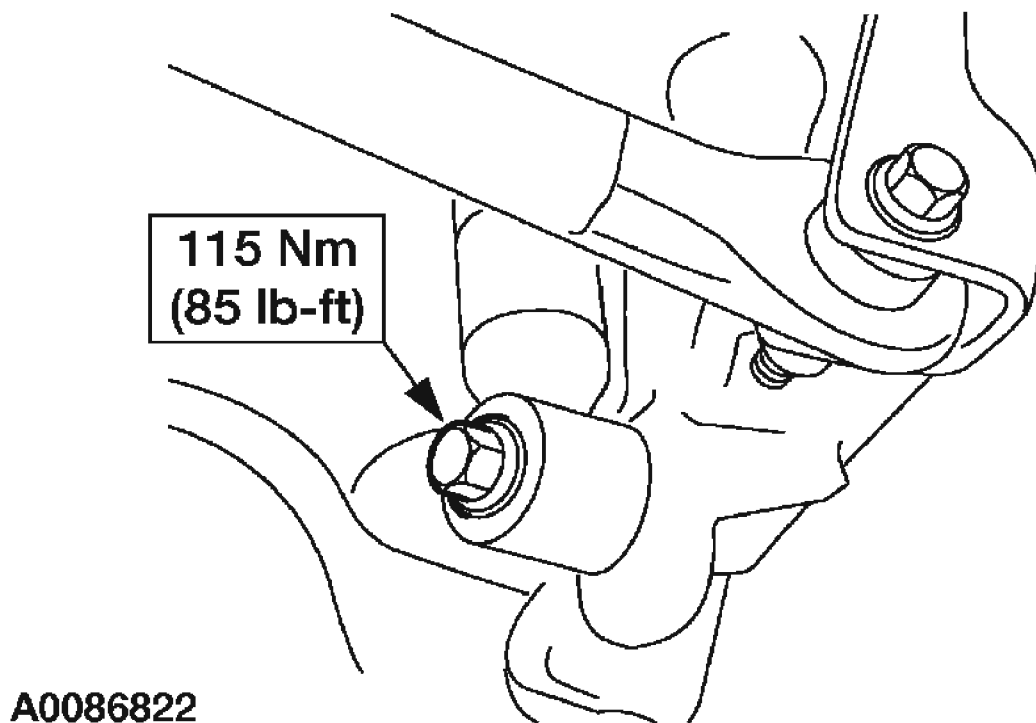


Fig. 70: Tightening Shock Absorber To Wheel Knuckle Retaining Bolt
Courtesy of FORD MOTOR CO.

3-door, 4-door and 5-door

12. Attach the stabilizer bar to the rear lower arm.

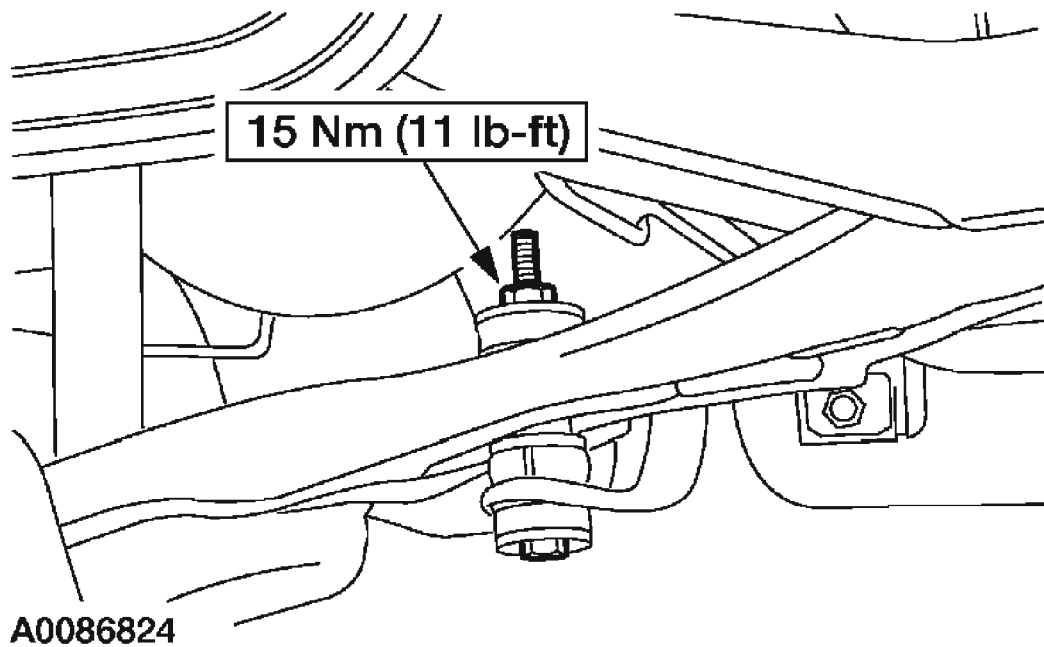


Fig. 71: Attaching Stabilizer Bar To Rear Lower Arm
Courtesy of FORD MOTOR CO.

All vehicles

13. Attach the parking brake cable to the wheel knuckle.

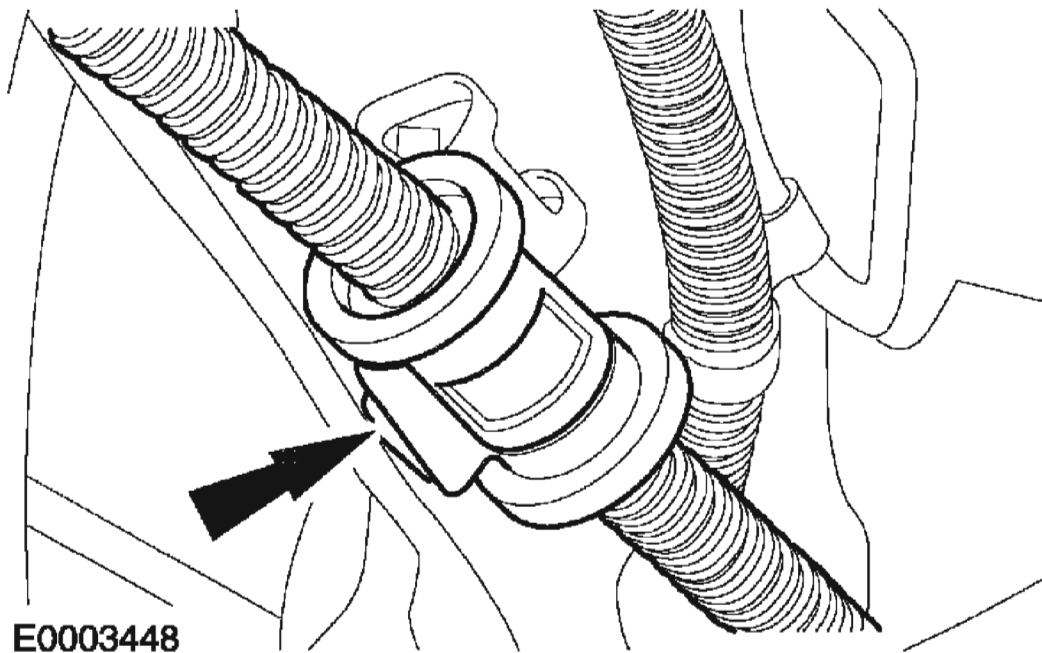


Fig. 72: Attaching Parking Brake Cable To Wheel Knuckle
Courtesy of FORD MOTOR CO.

14. Connect the rear brake hose.
 1. Connect the brake tube union.
 2. Install the clip.
 3. Remove the clamp.

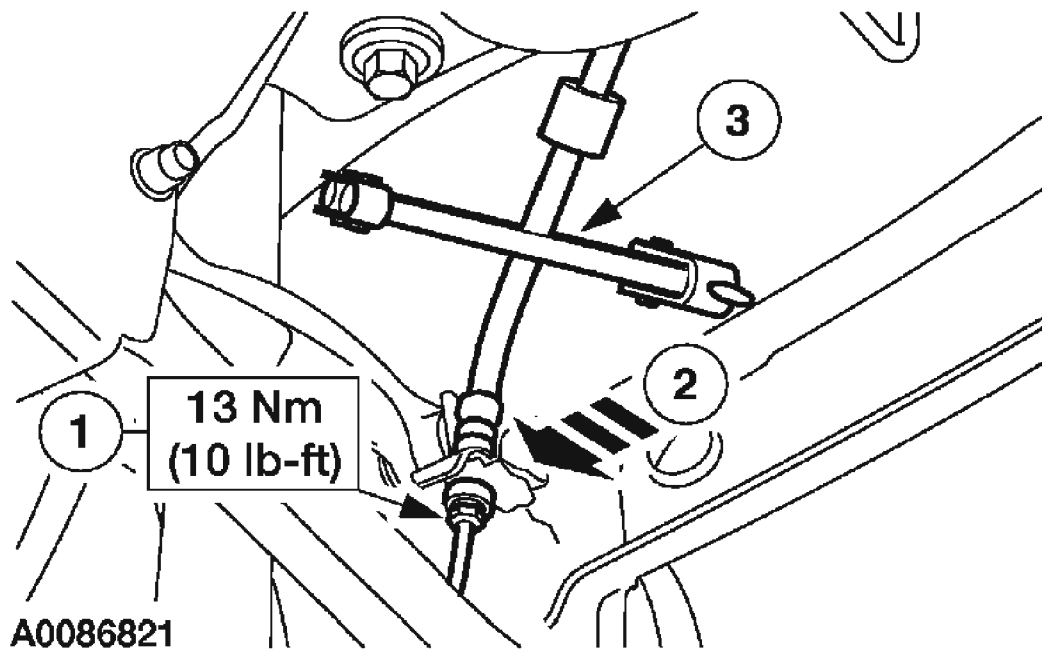


Fig. 73: Connecting Rear Brake Hose
Courtesy of FORD MOTOR CO.

Vehicles with rear drum brakes

15. Install the brake drum. For additional information, refer to **DRUM BRAKE** .

Vehicles with rear disc brakes

16. Install the brake disc shield. For additional information, refer to **REAR DISC BRAKE** .

All vehicles

17. Bleed the brake system. For additional information, refer to **HYDRAULIC BRAKE ACTUATION** .
18. Check the rear toe setting and adjust if necessary. For additional information, refer to **SUSPENSION SYSTEM-GENERAL INFORMATION** .

NOTE: Final tightening of the rear lower arm adjustment cam nut should be carried out when the vehicle weight is on the road wheels.

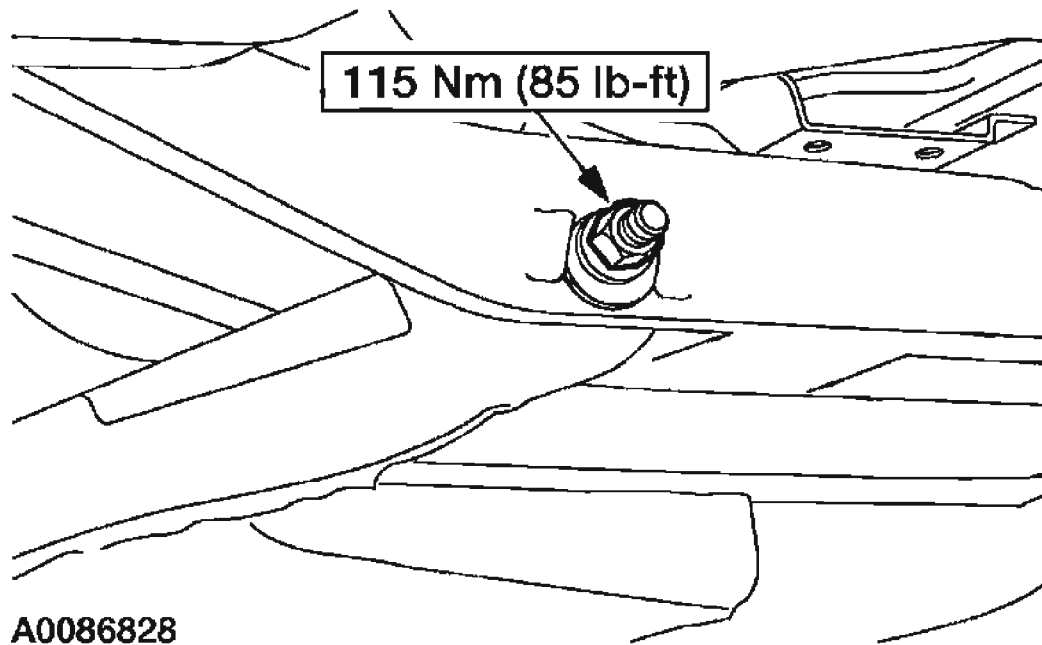


Fig. 74: Tightening Rear Lower Arm Adjustment Cam Nut
Courtesy of FORD MOTOR CO.

19. Tighten the rear lower arm adjustment cam nut.

WHEEL SPINDLE

Removal

All Vehicles

1. Release the parking brake.
2. Remove the wheel and tire. For additional information, refer to **WHEELS AND TIRES**.

Vehicles with anti-lock brakes

3. Detach the wheel speed sensor.

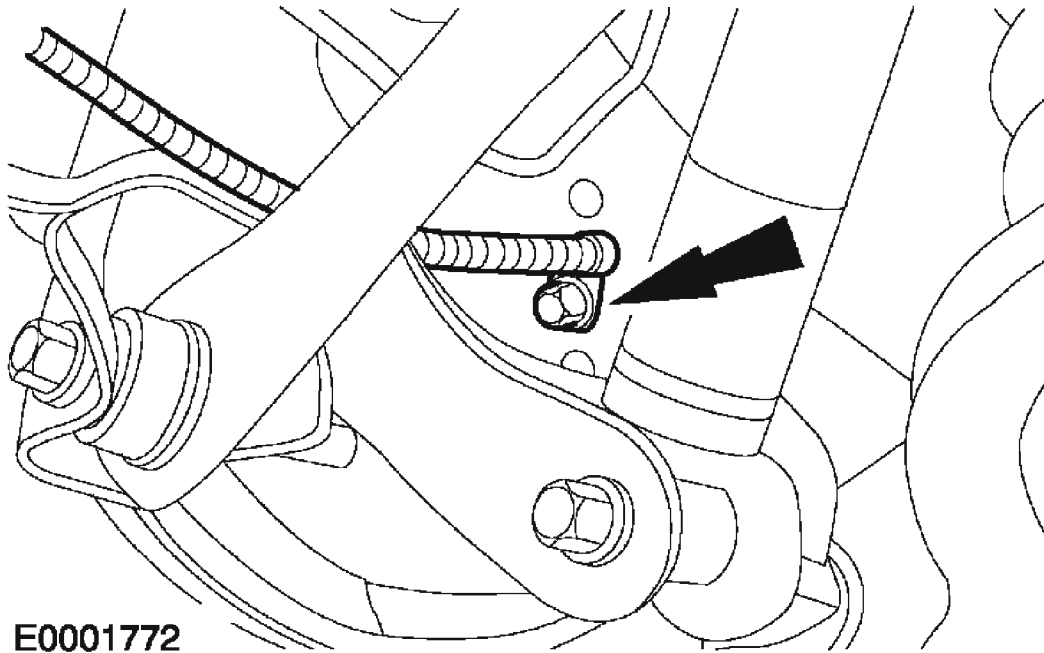
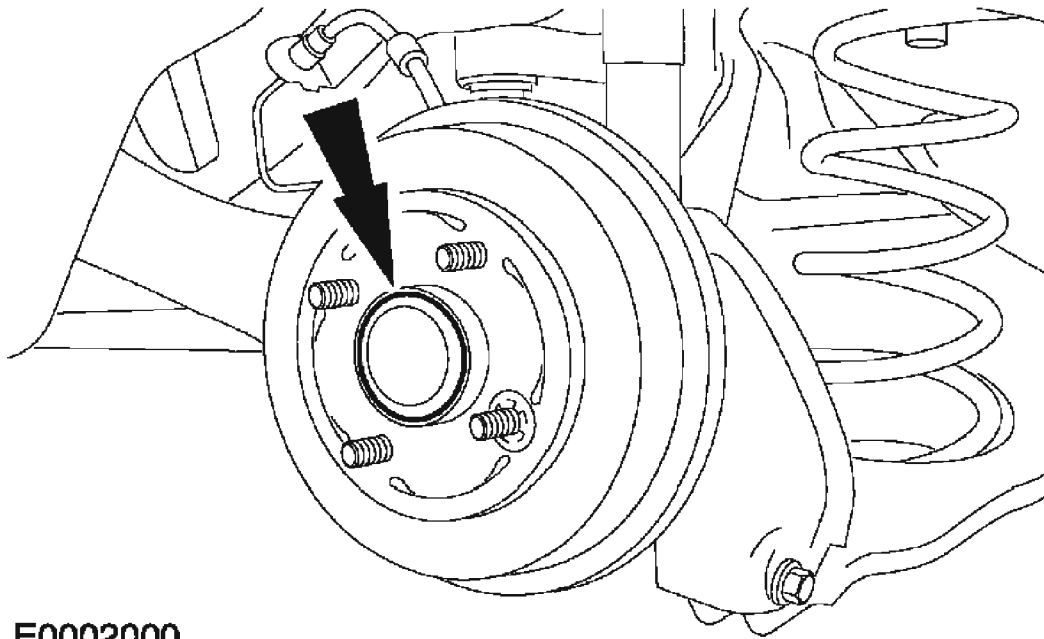


Fig. 75: Detaching Wheel Speed Sensor
Courtesy of FORD MOTOR CO.

All vehicles

NOTE: If the dust cap is damaged during removal, a new dust cap must be used.



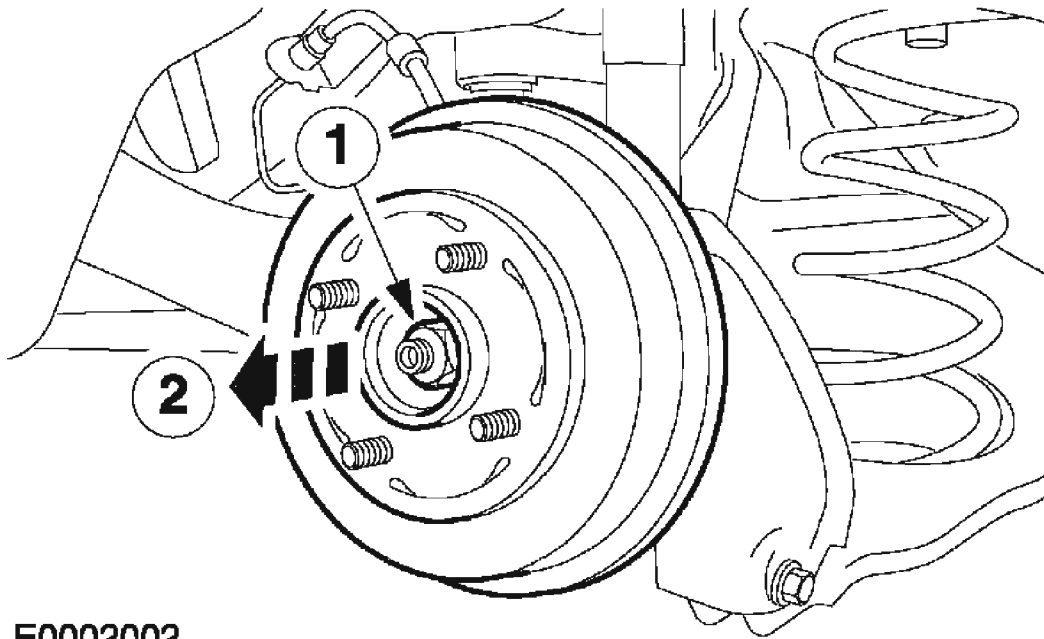
E0002000

Fig. 76: Removing Dust Cap
Courtesy of FORD MOTOR CO.

4. Remove the dust cap.

CAUTION: Use a socket to remove the hub retaining nut to prevent damage.

CAUTION: Make sure the ABS sensor ring (if equipped), is not knocked or damaged and is kept free from metallic fragments when removing the brake drum.



E0002002

Fig. 77: Removing Brake Drum
Courtesy of FORD MOTOR CO.

5. Remove the brake drum.
 1. Remove the hub retaining nut.
 2. Remove the brake drum.
6. Remove the wheel spindle.

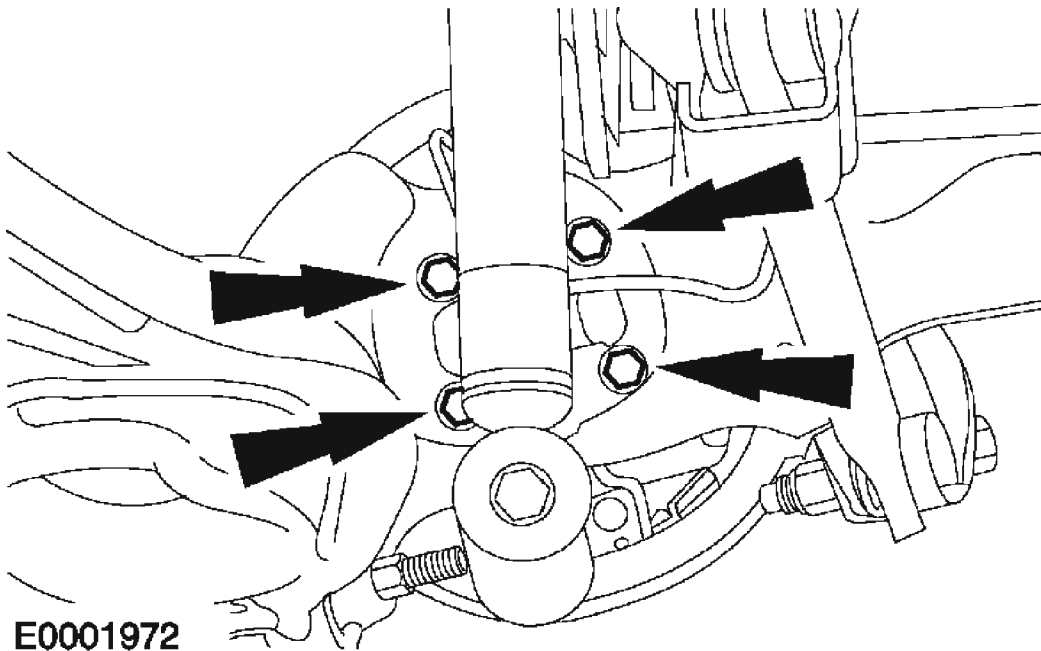


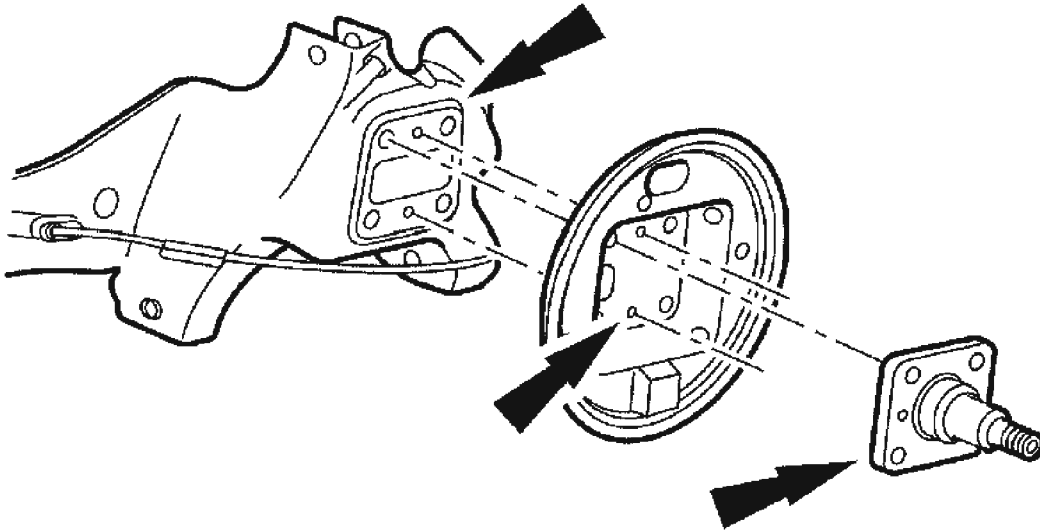
Fig. 78: Removing Wheel Spindle
Courtesy of FORD MOTOR CO.

Installation

CAUTION: Make sure that the mating surfaces are clean and free from rust and foreign materials.

ALL VEHICLES

CAUTION: Make sure that the wheel spindle-to-brake backing plate mating surface area and the brake backing plate-to-knuckle mating area is free of any foreign material before installing the wheel spindle.



A0093769

Fig. 79: Cleaning Wheel Spindle Mating Surface
Courtesy of FORD MOTOR CO.

1. Clean the following areas manually using a suitable abrasive disc:
 - Wheel spindle mating surface.
 - Brake backing plate-to-wheel spindle mating surface.
 - Brake backing plate-to-knuckle mating surface.
 - Knuckle mating surface.
2. Install the wheel spindle.

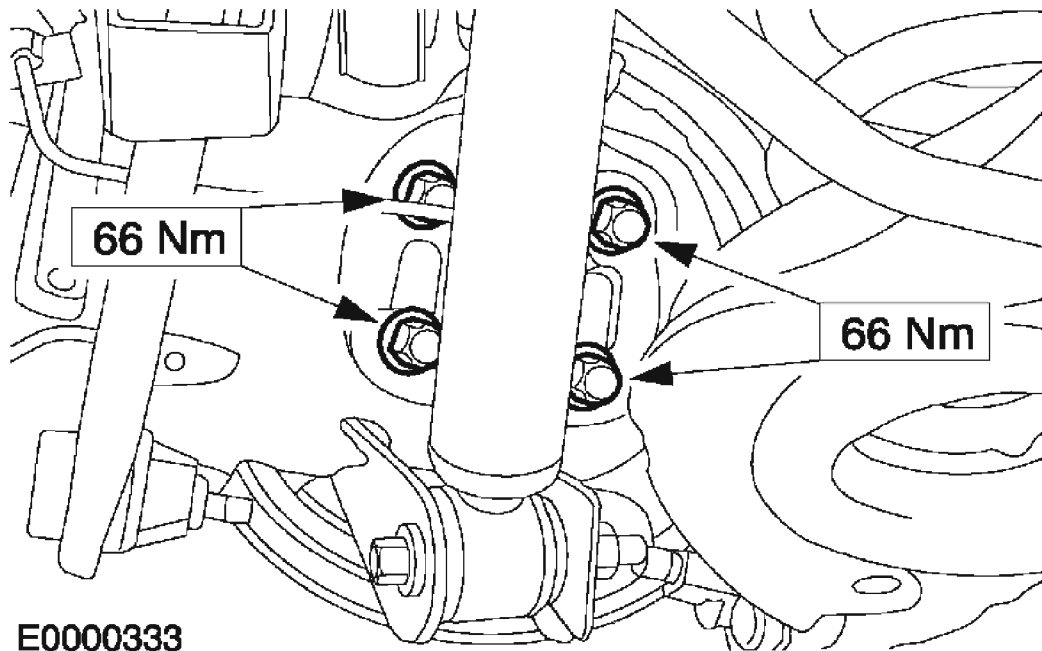
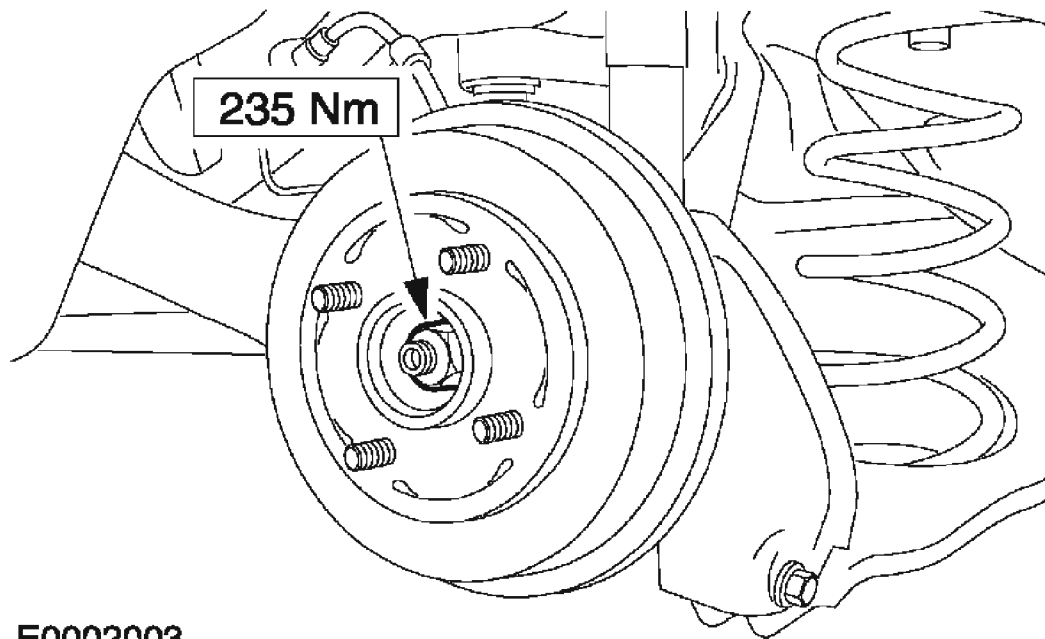


Fig. 80: Installing Wheel Spindle
Courtesy of FORD MOTOR CO.

CAUTION: Use a socket to install the hub retaining nut to prevent damage.

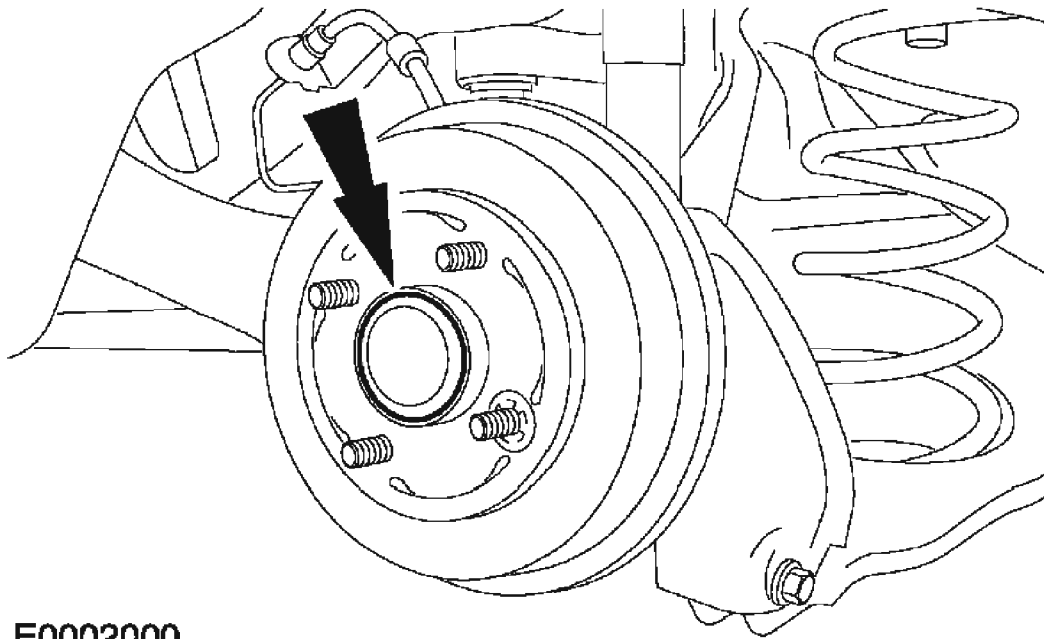
CAUTION: Make sure the wheel speed sensor ring (if equipped), is not knocked or damaged and is kept free from metallic fragments when installing the brake drum.



E0002003

Fig. 81: Installing Brake Drum
Courtesy of FORD MOTOR CO.

3. Install the brake drum.
4. Install the dust cap.



E0002000

Fig. 82: Installing Dust Cap
Courtesy of FORD MOTOR CO.

Vehicles with anti-lock brakes

5. Install the wheel speed sensor.

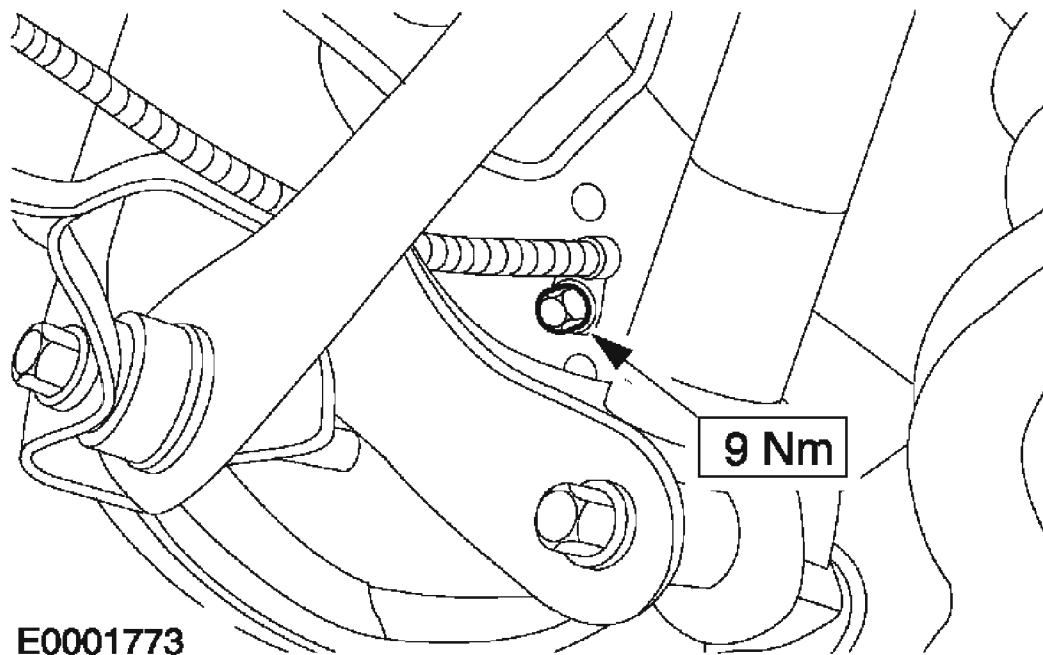


Fig. 83: Installing Wheel Speed Sensor
Courtesy of FORD MOTOR CO.

All vehicles

6. Install the wheel and tire. For additional information, refer to **WHEELS AND TIRES** .

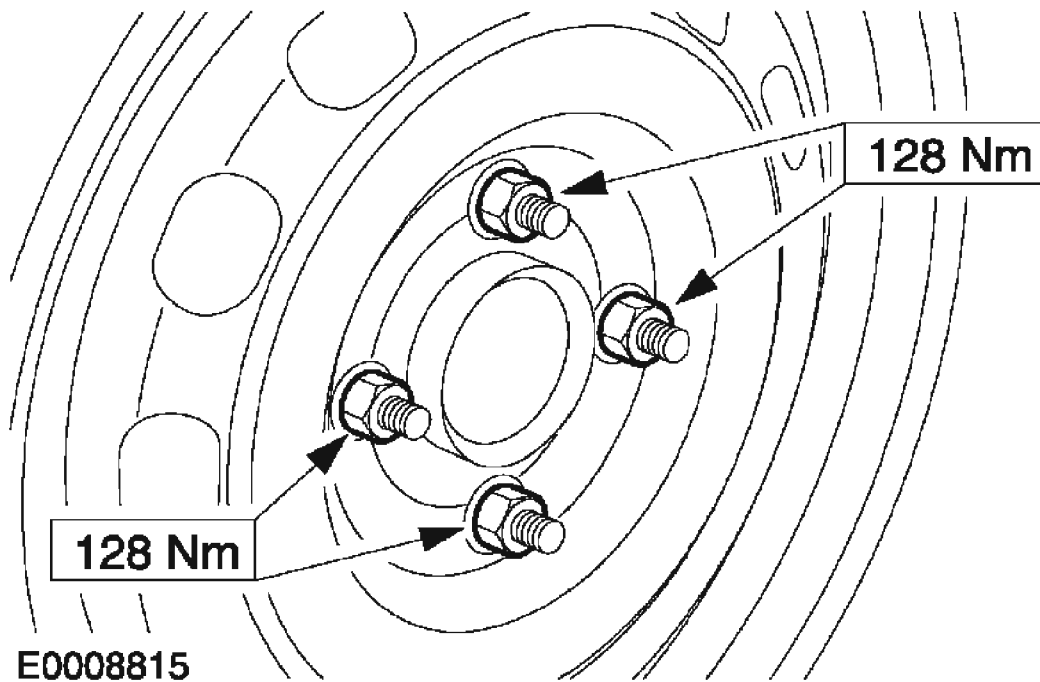


Fig. 84: Installing Wheel And Tire
Courtesy of FORD MOTOR CO.

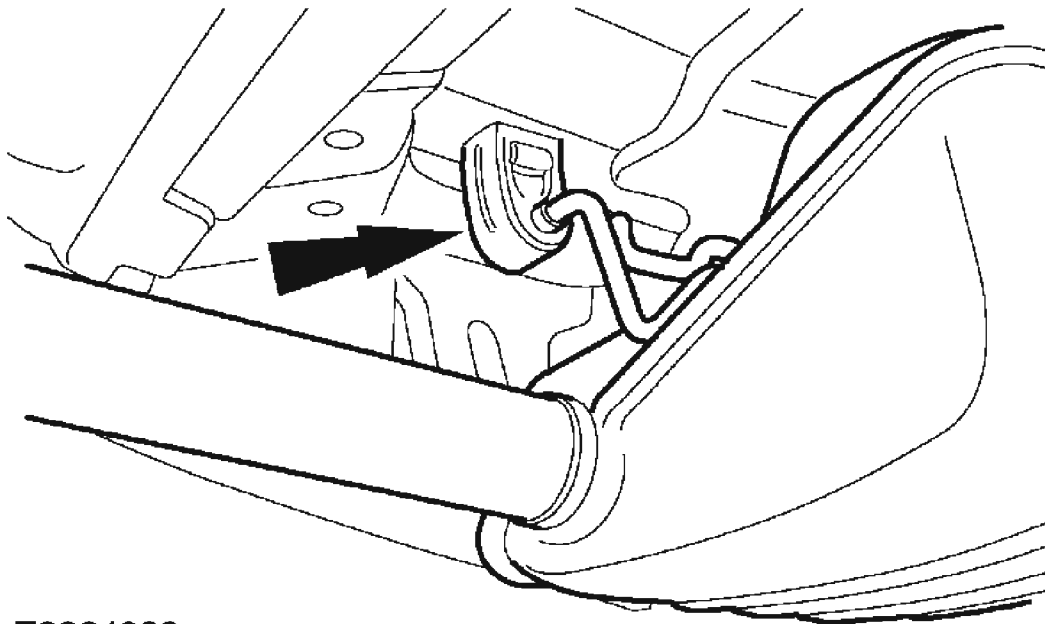
7. Tighten the parking brake.

SHOCK ABSORBER - WAGON

Removal

1. Remove the rear wheel and tire. For additional information, refer to WHEELS AND TIRES.

NOTE: When removing the left-hand shock absorber, it is necessary to detach the exhaust system from the rear hanger insulator.



E0024933

Fig. 85: Detaching Exhaust System From Rear Hanger Insulator
Courtesy of FORD MOTOR CO.

2. Detach the exhaust system from the rear hanger insulator.

NOTE: When removing the left-hand shock absorber, it is necessary to remove the exhaust heat shield.

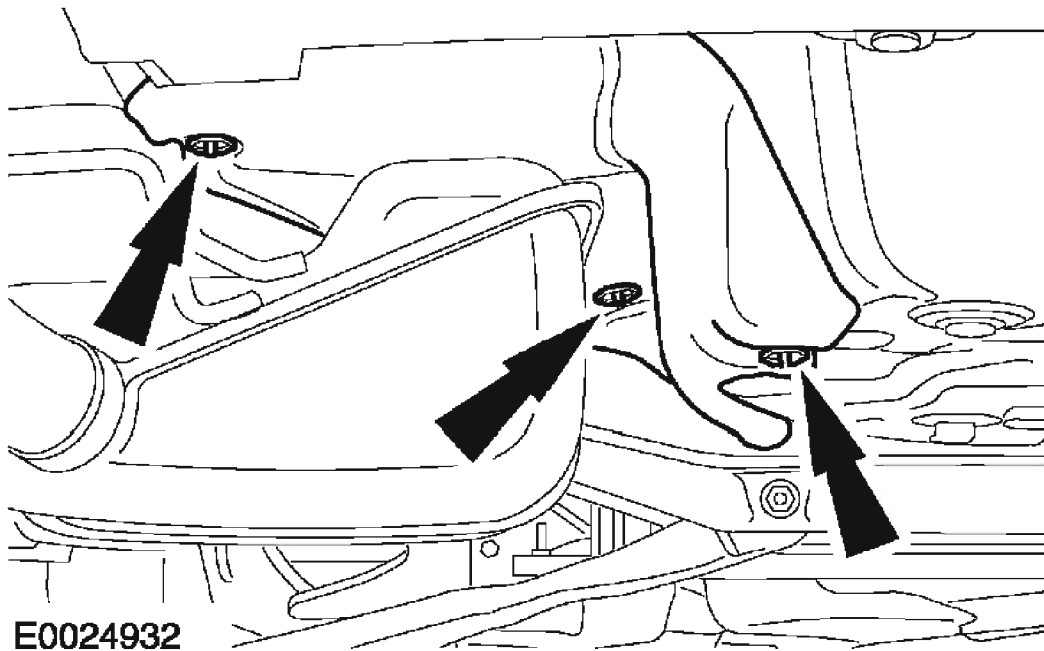


Fig. 86: Removing Exhaust Heat Shield
Courtesy of FORD MOTOR CO.

3. Remove the exhaust heat shield.
4. Using a suitable transmission jack, support the lower arm.
5. Remove the shock absorber upper retaining bolt (right-hand side shown).

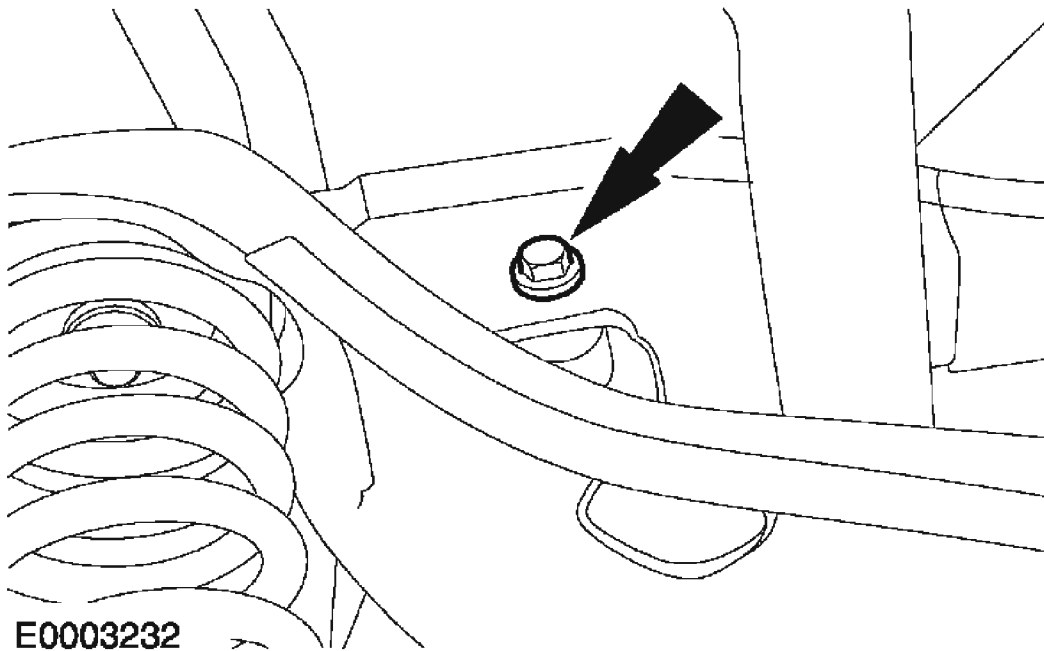


Fig. 87: Removing Shock Absorber Upper Retaining Bolt
Courtesy of FORD MOTOR CO.

6. Remove the shock absorber (right-hand side shown).

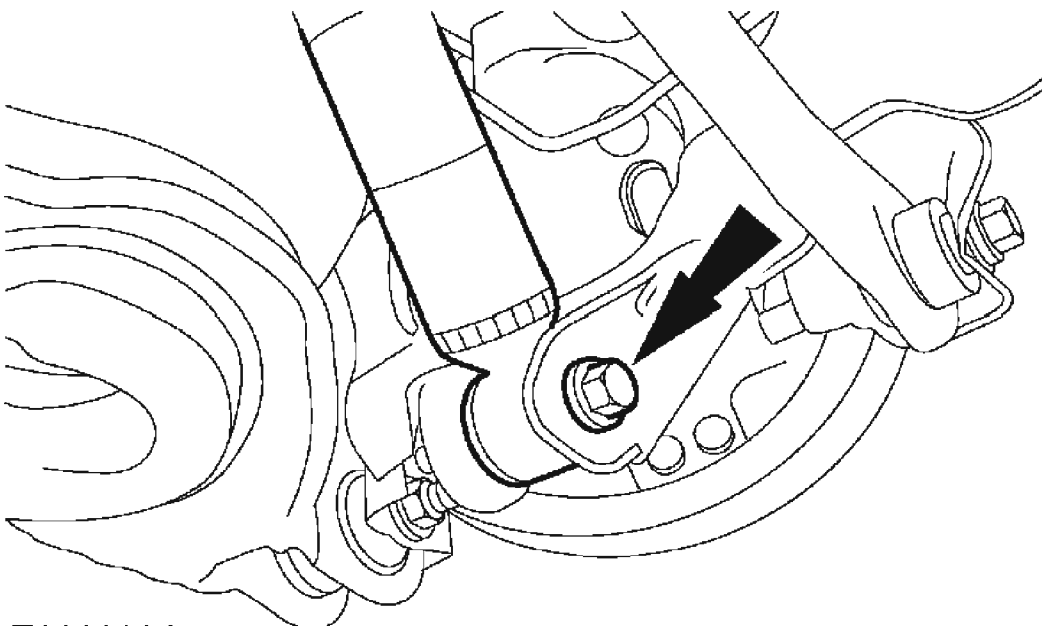


Fig. 88: Removing Shock Absorber
Courtesy of FORD MOTOR CO.

Installation

NOTE: Final tightening of the shock absorber lower retaining bolt should be carried out when the vehicle weight is on the road wheels.

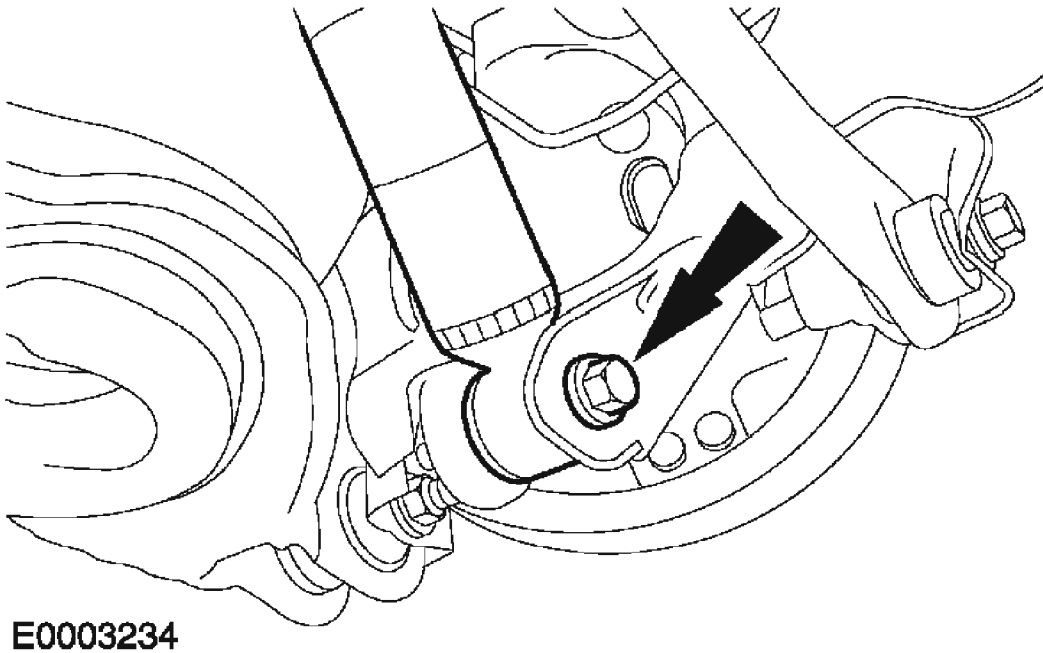


Fig. 89: Installing Shock Absorber
Courtesy of FORD MOTOR CO.

1. Install the shock absorber (right-hand side shown).
2. Install the shock absorber upper retaining bolt (right-hand side shown).

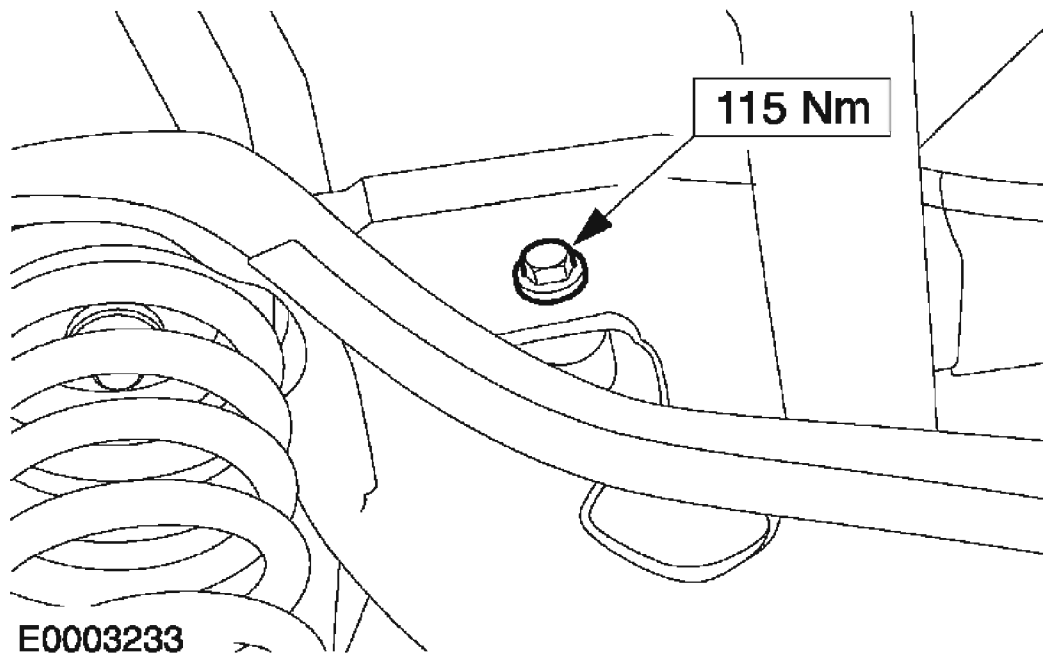


Fig. 90: Installing Shock Absorber Upper Retaining Bolt
Courtesy of FORD MOTOR CO.

3. Lower and remove the transmission jack.

NOTE: After installing the left-hand shock absorber, it is necessary to install the exhaust heat shield.

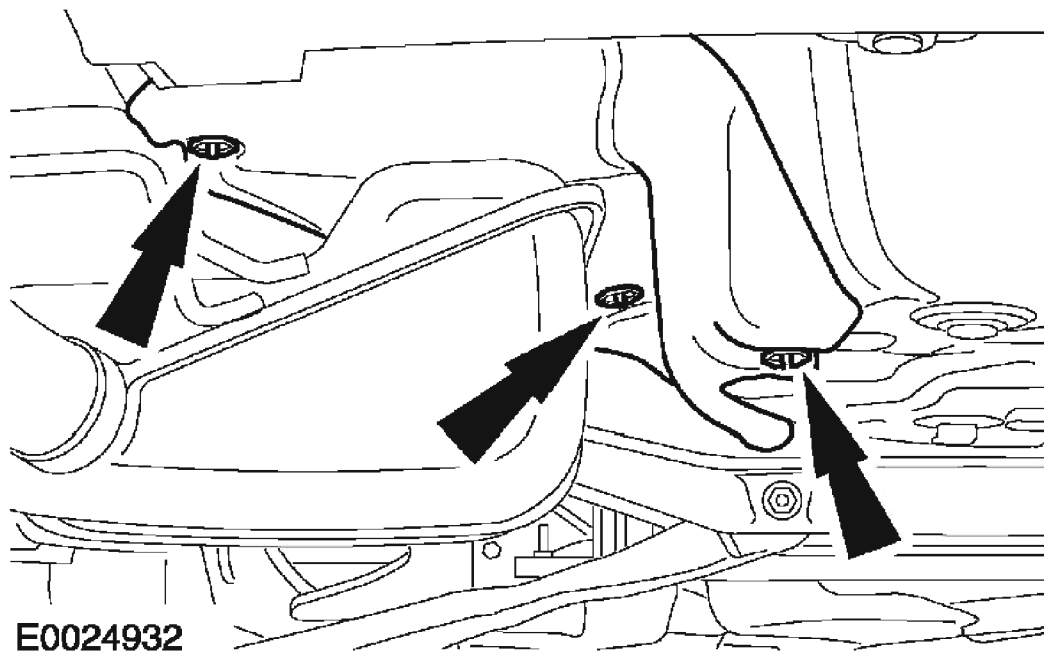
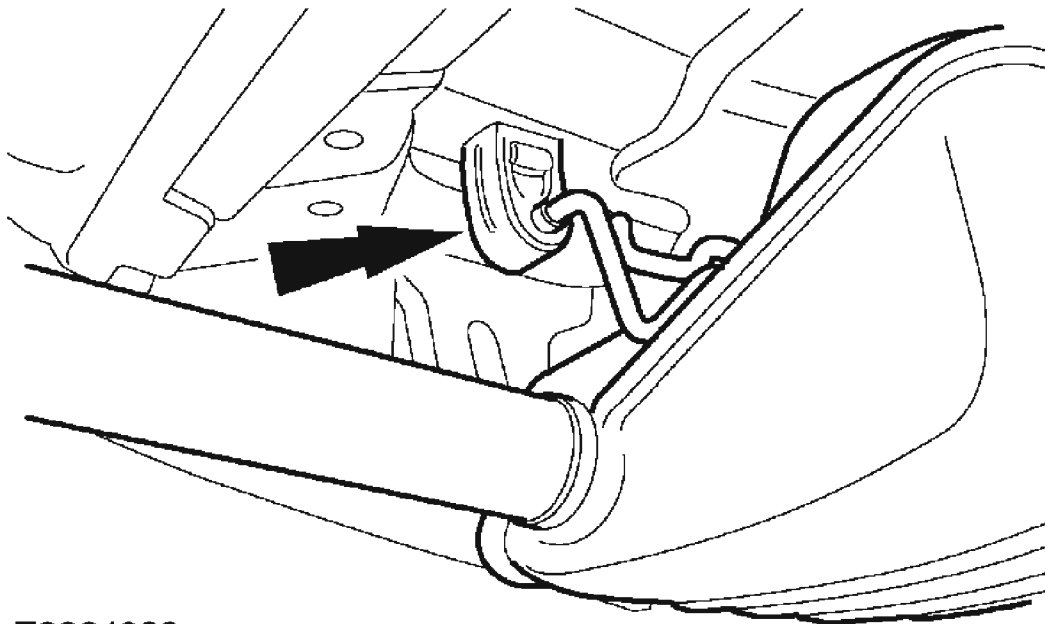


Fig. 91: Installing Exhaust Heat Shield
Courtesy of FORD MOTOR CO.

4. Install the exhaust heat shield.

NOTE: After installing the left-hand shock absorber, it is necessary to attach the exhaust system to the rear hanger insulator.



E0024933

Fig. 92: Attaching Exhaust System To Rear Hanger Insulator
Courtesy of FORD MOTOR CO.

5. Attach the exhaust system to the rear hanger insulator.
6. Install the rear wheel and tire. For additional information, refer to **WHEELS AND TIRES** .
7. Tighten the shock absorber lower retaining bolt (right-hand side shown).

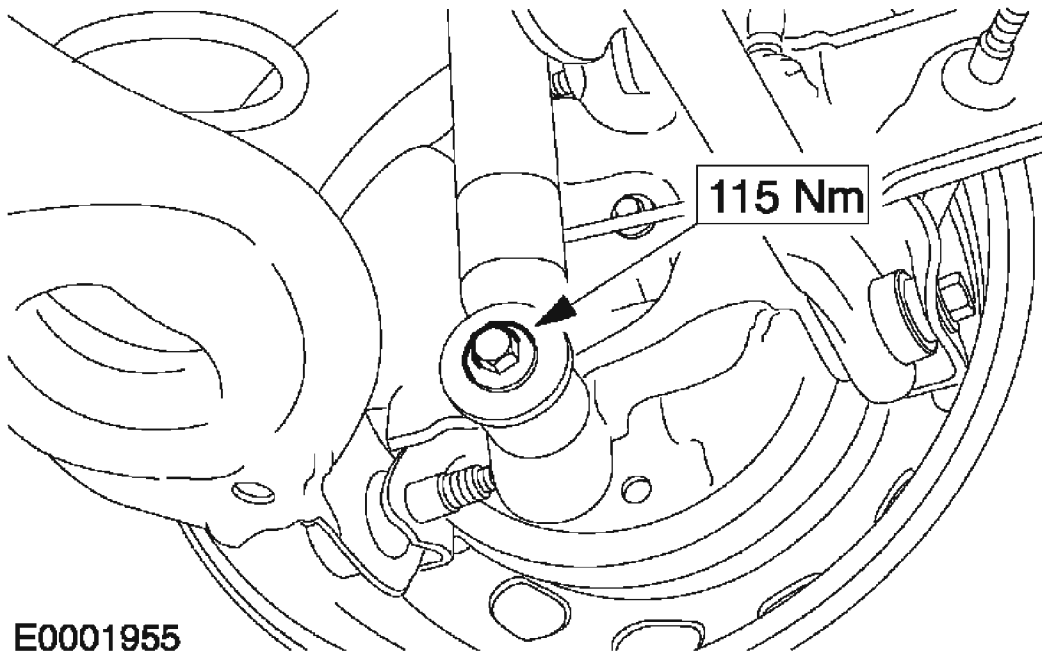


Fig. 93: Tightening Shock Absorber Lower Retaining Bolt
Courtesy of FORD MOTOR CO.

SHOCK ABSORBER - 3-DOOR/4-DOOR

Removal

1. Detach the load space trim panel and position to one side.

CAUTION: Use a suitable spanner to prevent the piston rod from rotating.

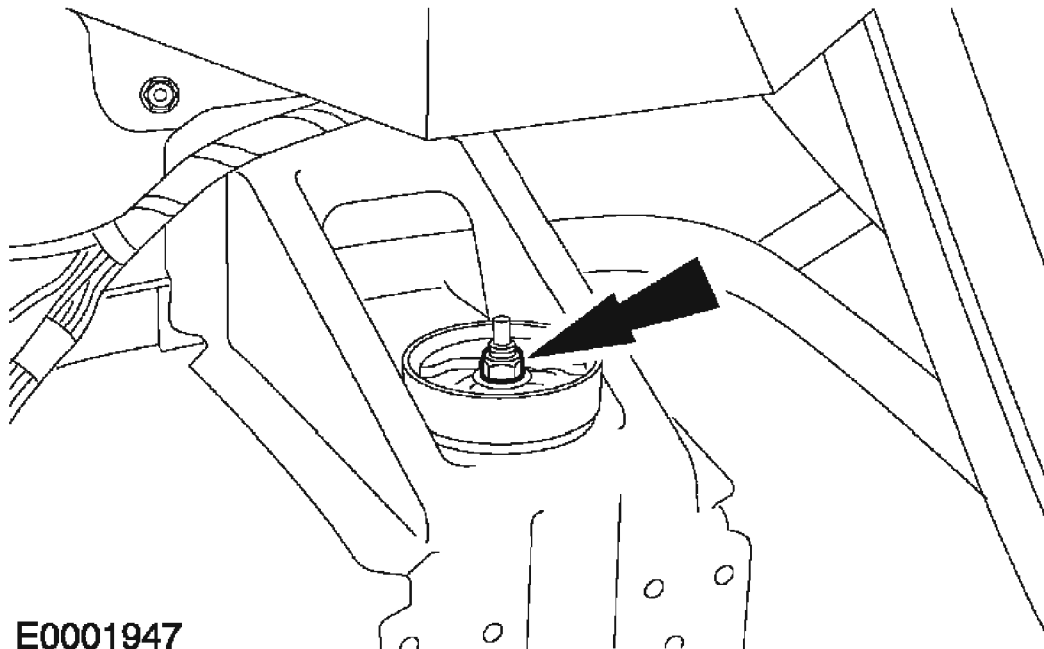


Fig. 94: Removing Shock Absorber Upper Mounting Retaining Nut
Courtesy of FORD MOTOR CO.

2. Remove the shock absorber upper mounting retaining nut.
3. Raise and support the vehicle. For additional information, refer to **JACKING AND LIFTING** .
4. Remove the shock absorber.

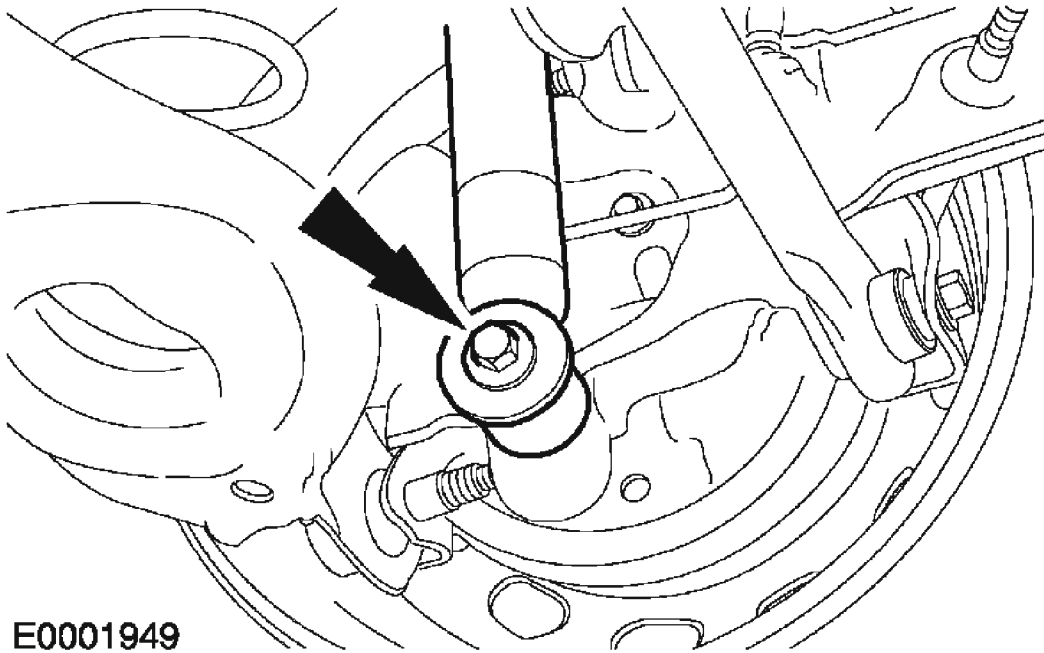


Fig. 95: Removing Shock Absorber
Courtesy of FORD MOTOR CO.

Installation

NOTE: The final tightening of the shock absorber upper retaining nut and lower retaining bolt should be carried out when the vehicle weight is on the road wheels.

NOTE: Do not fully tighten the shock absorber lower retaining bolt at this stage.

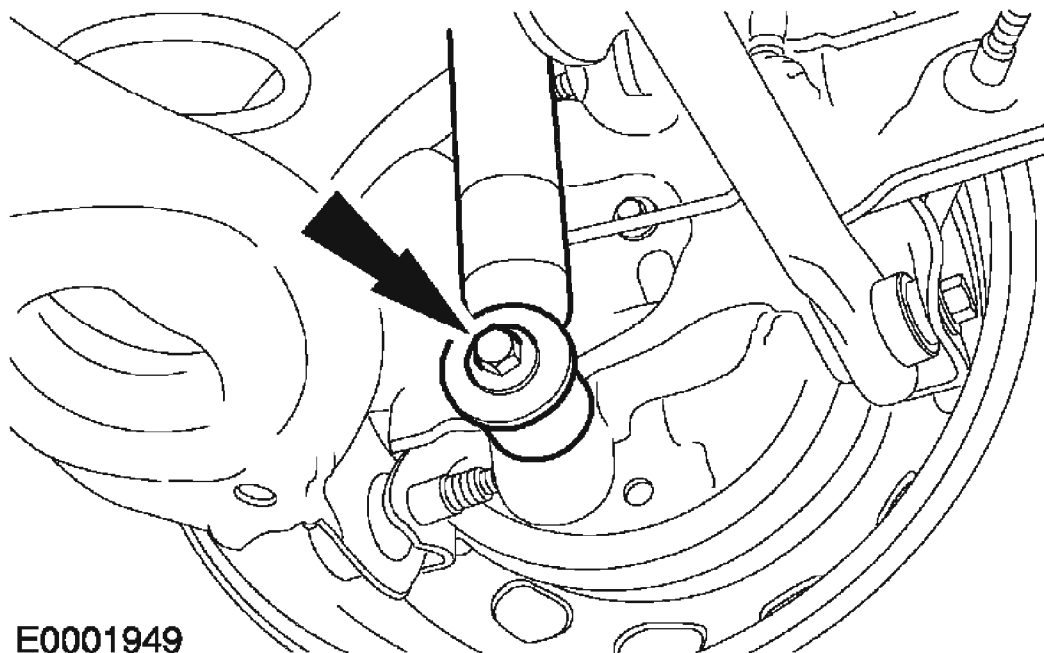
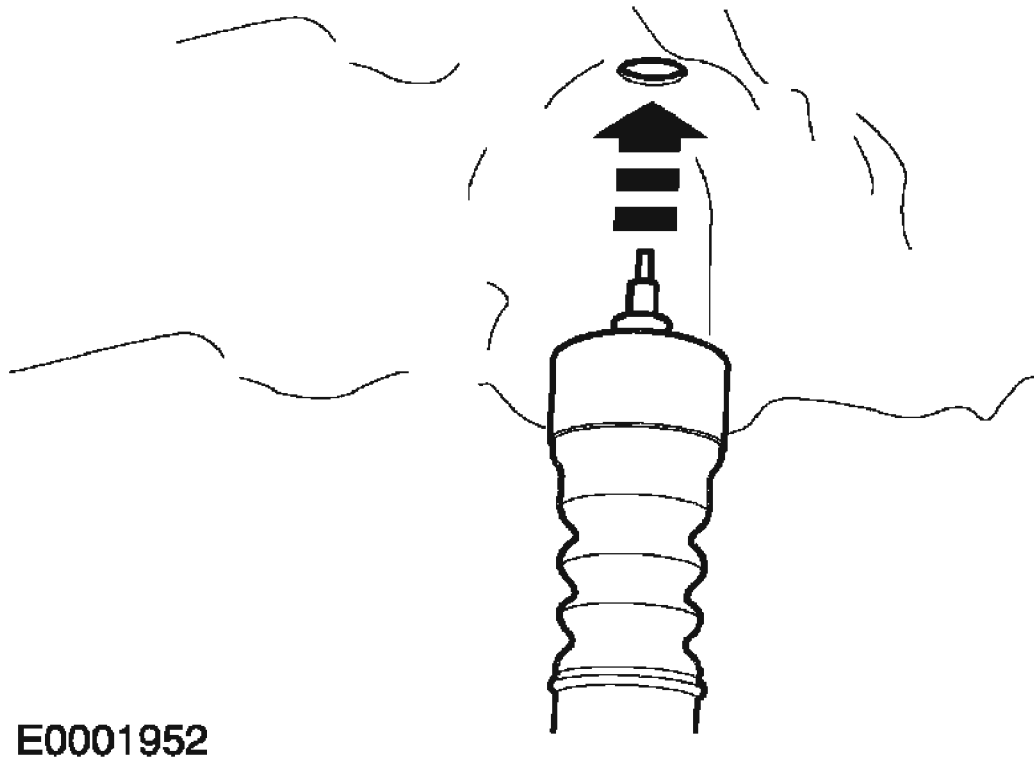


Fig. 96: Installing Shock Absorber
Courtesy of FORD MOTOR CO.

1. Install the shock absorber.

NOTE: **Guide the shock absorber piston rod into the locating hole.**



E0001952

Fig. 97: Lowering Vehicle
Courtesy of FORD MOTOR CO.

2. Lower the vehicle.

CAUTION: Use a suitable spanner to prevent the piston rod from rotating.

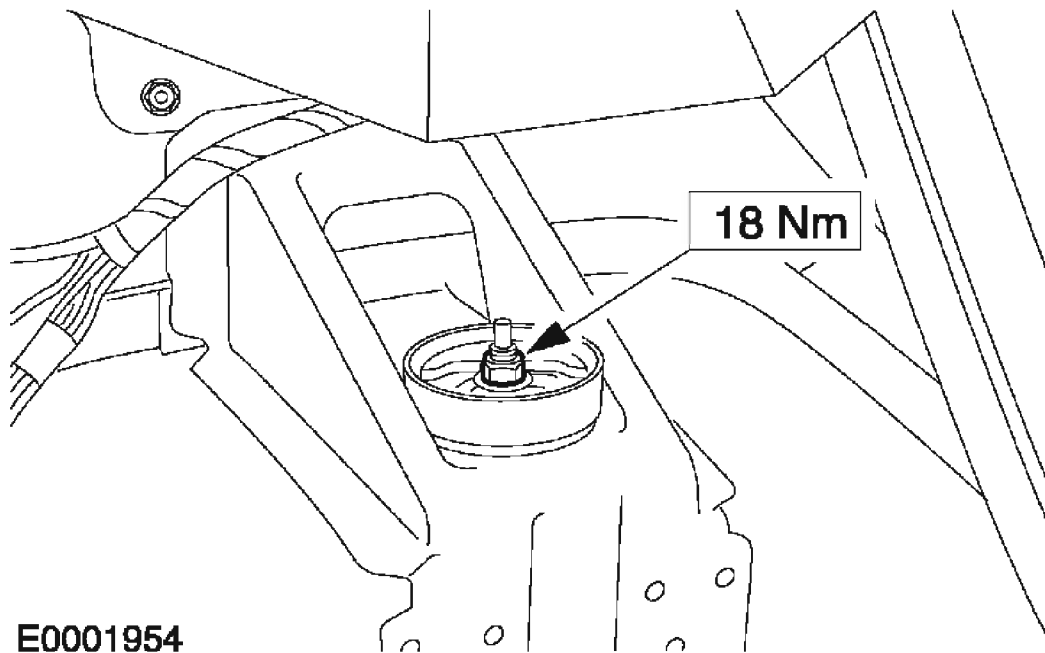


Fig. 98: Installing Shock Absorber Upper Mounting Retaining Nut
Courtesy of FORD MOTOR CO.

3. Install the shock absorber upper mounting retaining nut.
4. Attach the load space trim panel.
5. Tighten the shock absorber lower retaining bolt.

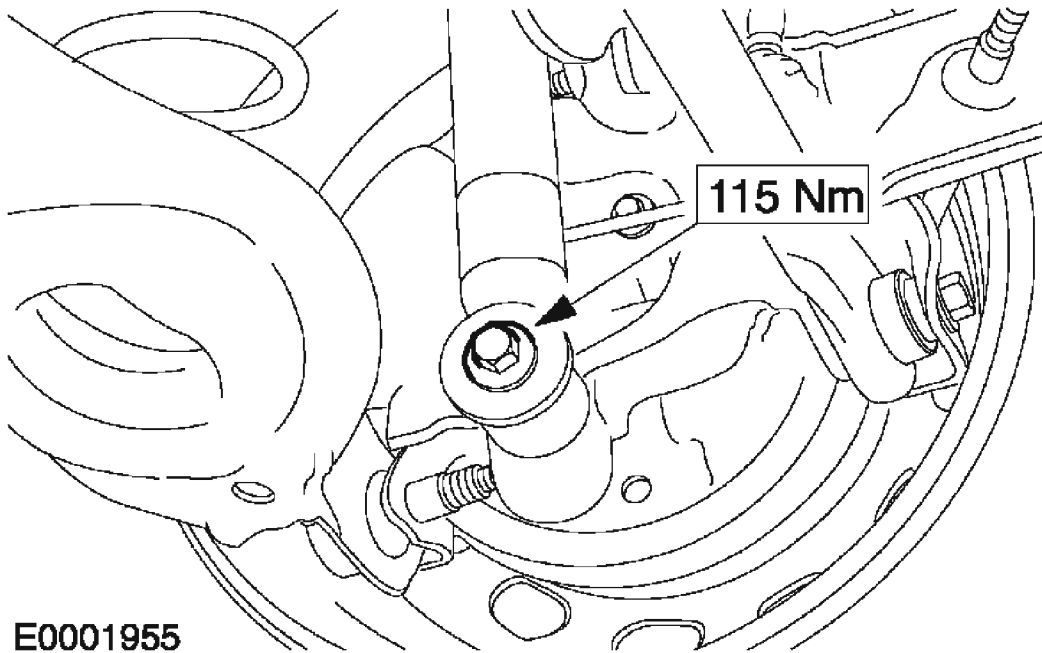
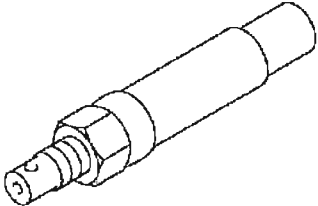


Fig. 99: Tightening Shock Absorber Lower Retaining Bolt
Courtesy of FORD MOTOR CO.

SPRING

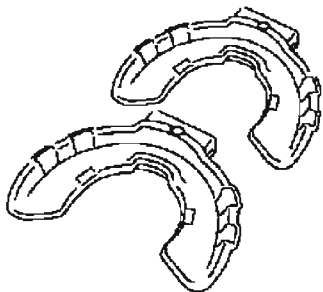
Special Tool(s)

SPECIAL TOOLS DESCRIPTION

 14042	Compressor, Coil Spring 204-167 (14-042)
	Adapters for 204-167 204-215 (15-111)

2005 Ford Focus ZX4 S

2005 SUSPENSION Rear Suspension - Focus

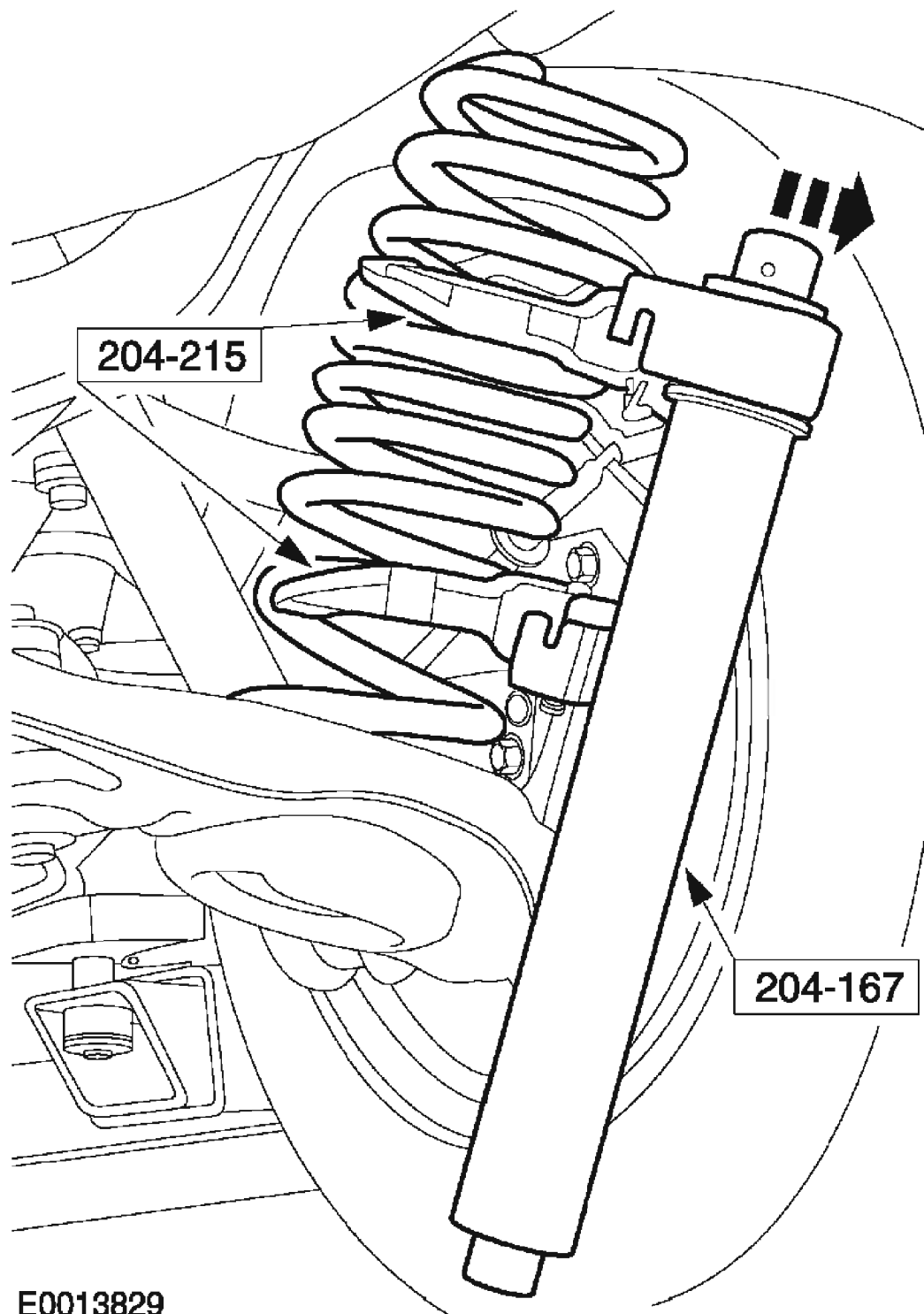


204215

Removal

1. Raise and support the vehicle. For additional information, refer to **JACKING AND LIFTING** .

WARNING: As the spring is under extreme tension care must be taken at all times. Failure to follow this instruction may result in personal injury.



E0013829

Fig. 100: Removing Spring Using Special Tools
Courtesy of FORD MOTOR CO.

2. Using the special tools, remove the spring.

2005 Ford Focus ZX4 S

2005 SUSPENSION Rear Suspension - Focus

Installation

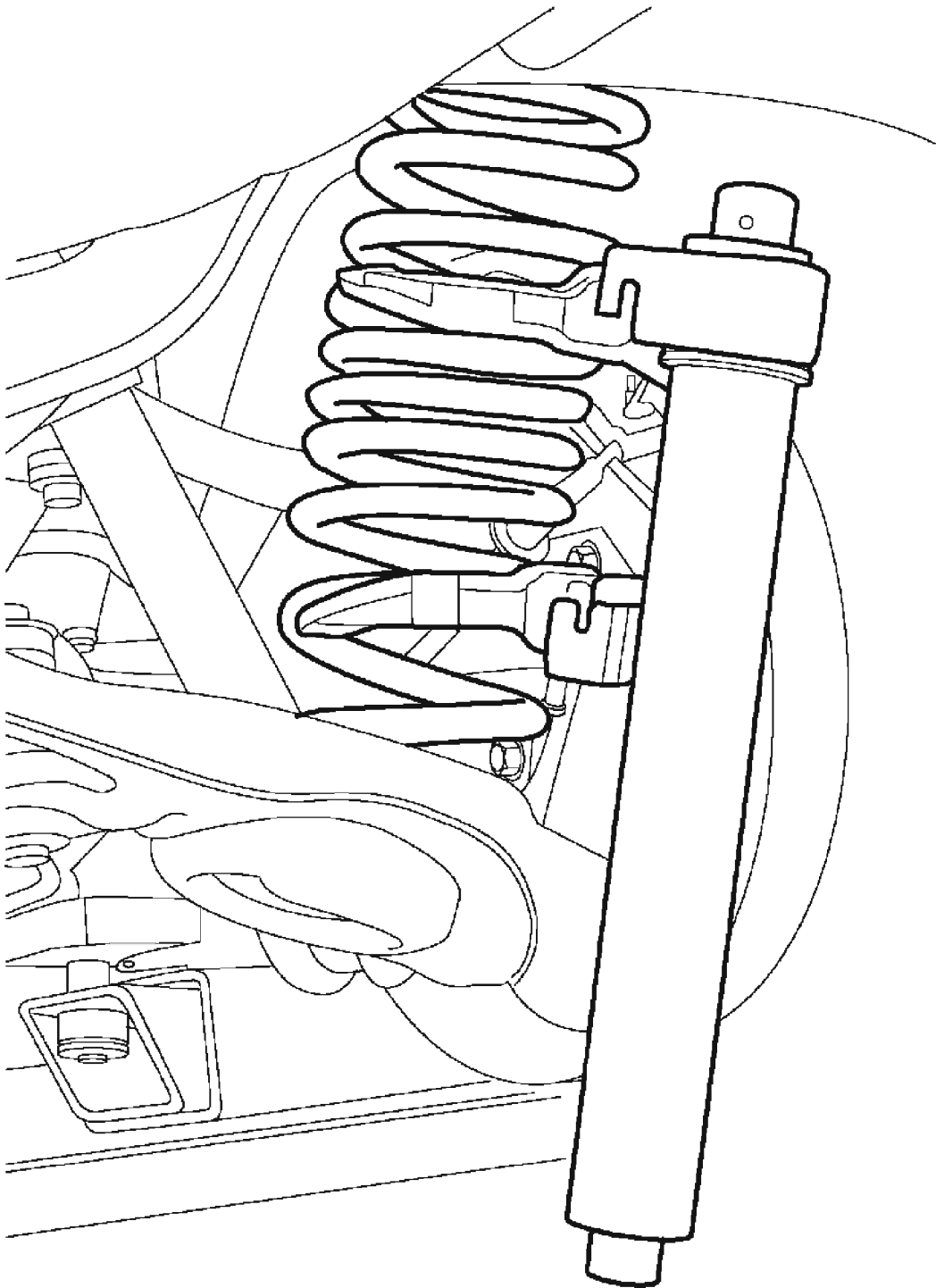
NOTE: Make sure the top seat mounting is installed, and the spring ends butt correctly against the upper and lower spring seats.

1. To install, reverse the removal procedure.

SPRING - 3-DOOR/4-DOOR

Removal

1. Remove the rear wheel and tire. For additional information, refer to **WHEELS AND TIRES**.
2. Using a suitable coil spring compressor, compress the spring.



E0025233

Fig. 101: Compressing Spring Using Suitable Coil Spring Compressor
Courtesy of FORD MOTOR CO.

3. Detach the shock absorber from the wheel knuckle.

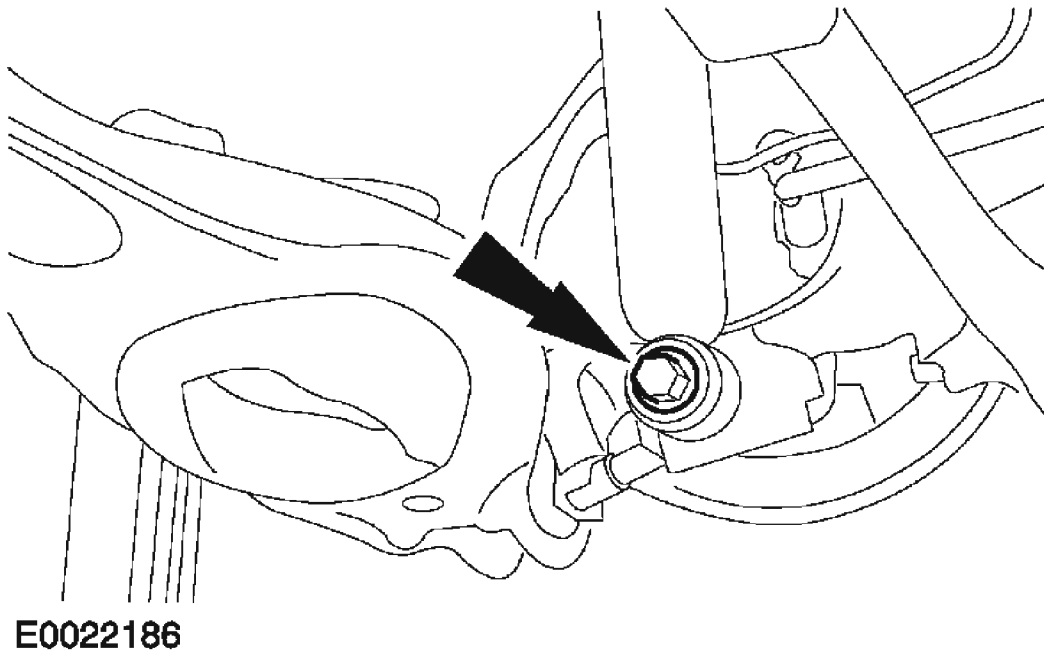
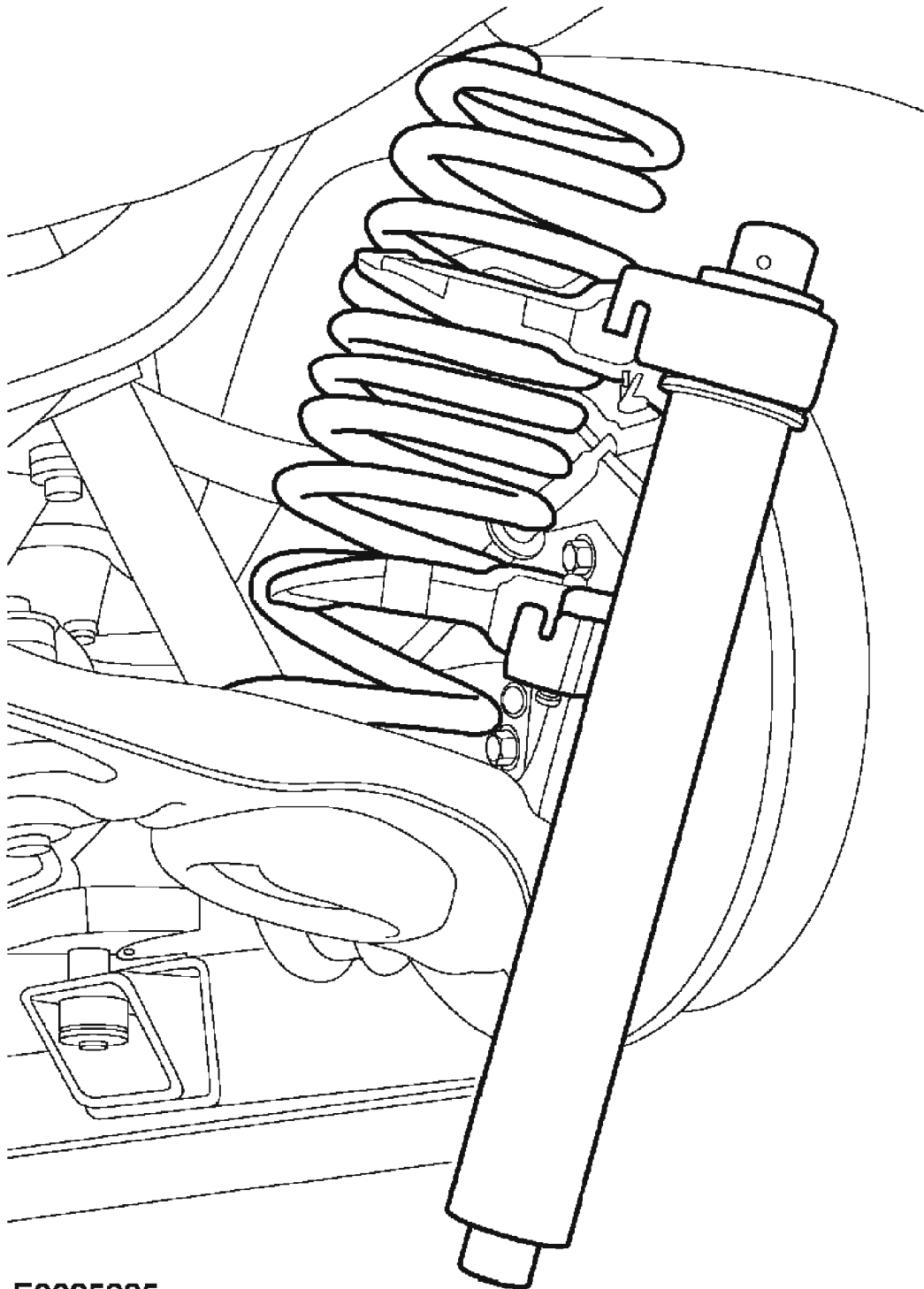


Fig. 102: Detaching Shock Absorber From Wheel Knuckle
Courtesy of FORD MOTOR CO.

WARNING: The spring is under extreme tension, care must be taken at all times. Failure to follow this instruction may result in personal injury.



E0025235

Fig. 103: Removing Spring
Courtesy of FORD MOTOR CO.

4. Remove the spring.

5. If the spring is to be removed from the coil spring compressor, mark the position of the coil spring compressor to the spring to aid installation.

Installation

NOTE: Final tightening of the shock absorber lower retaining bolt should be carried out when the vehicle weight is on the road wheels.

CAUTION: Make sure the top seat mounting is installed, and the spring ends butt correctly against the upper and lower spring seats.

1. Install the spring.

NOTE: Do not fully tighten the shock absorber lower retaining bolt at this stage.

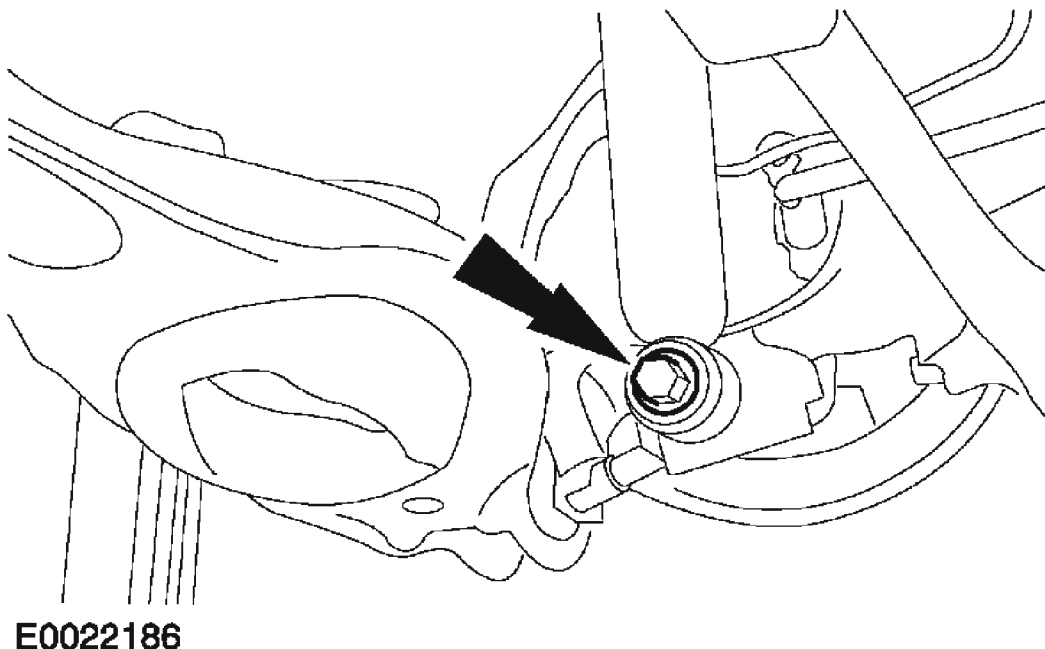


Fig. 104: Attaching Shock Absorber To Wheel Knuckle
Courtesy of FORD MOTOR CO.

2. Attach the shock absorber to the wheel knuckle.
3. Install the rear wheel and tire. For additional information, refer to **WHEELS AND TIRES**.

4. Tighten the shock absorber lower retaining bolt.

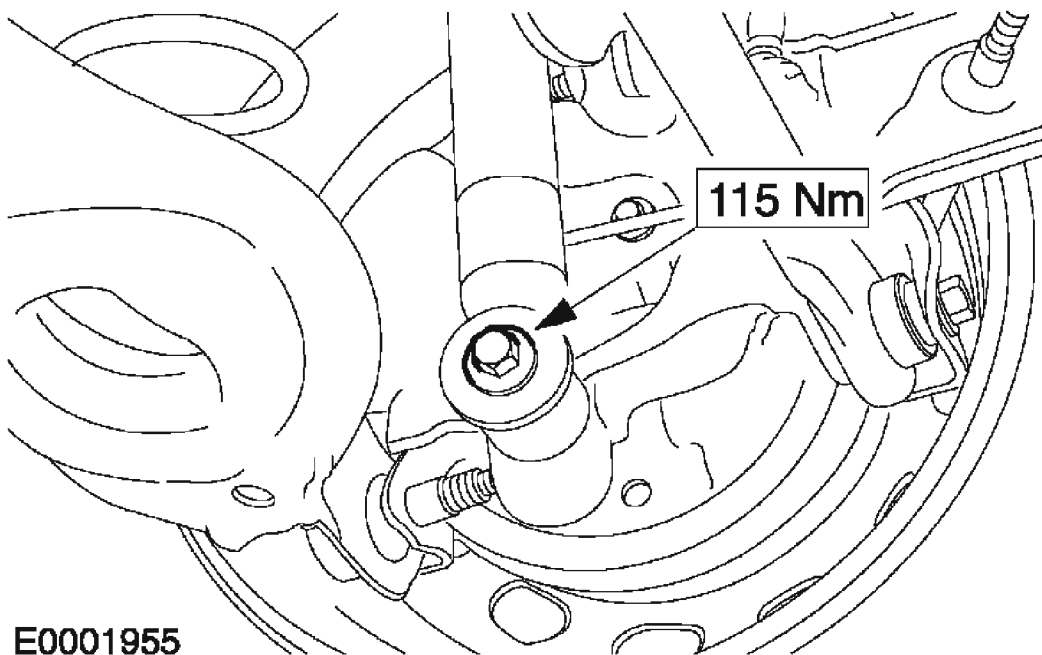


Fig. 105: Tightening Shock Absorber Lower Retaining Bolt
Courtesy of FORD MOTOR CO.

SPRING - WAGON

Removal

1. Remove the rear wheel and tire. For additional information, refer to **WHEELS AND TIRES**.
2. Detach the stabilizer bar from the rear lower arms.

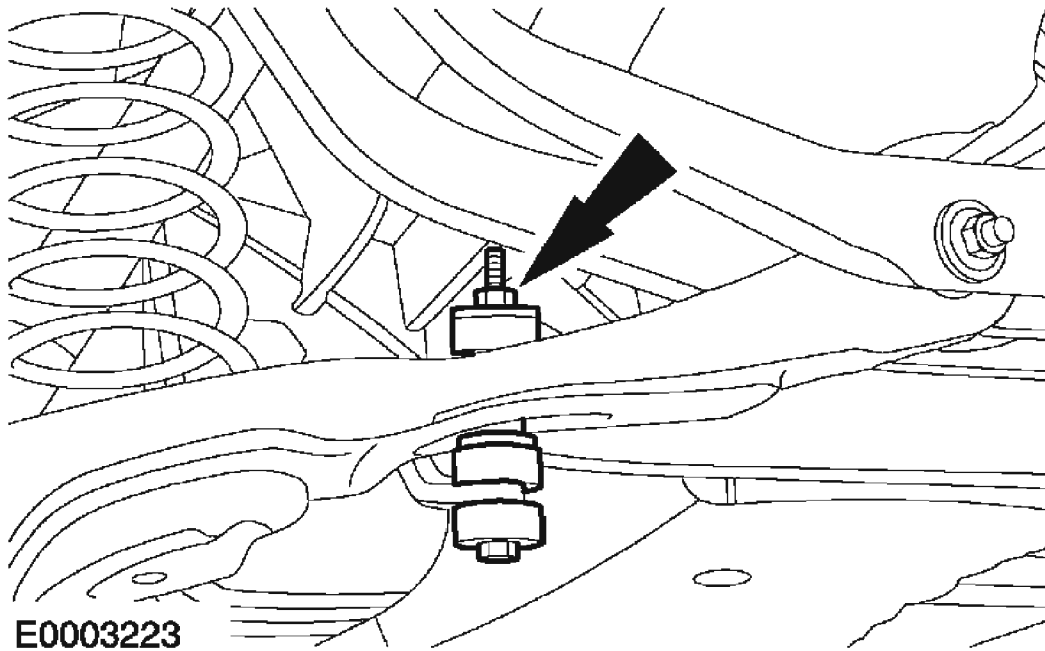


Fig. 106: Detaching Stabilizer Bar From Rear Lower Arms
Courtesy of FORD MOTOR CO.

3. Using a suitable transmission jack, raise the rear lower arm 32 mm (1.25 inches).

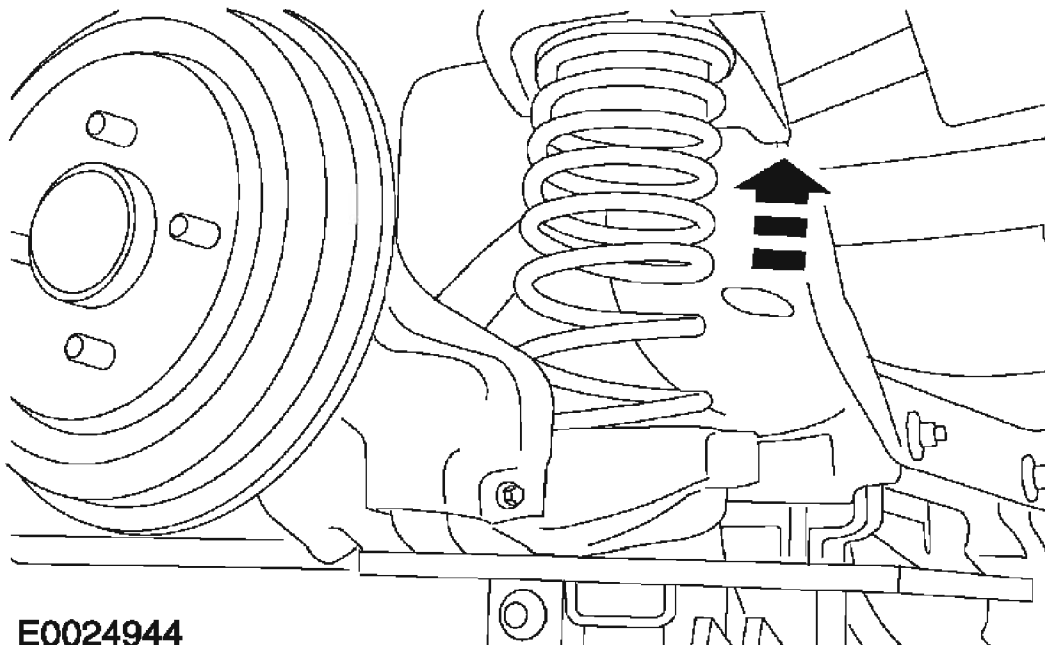
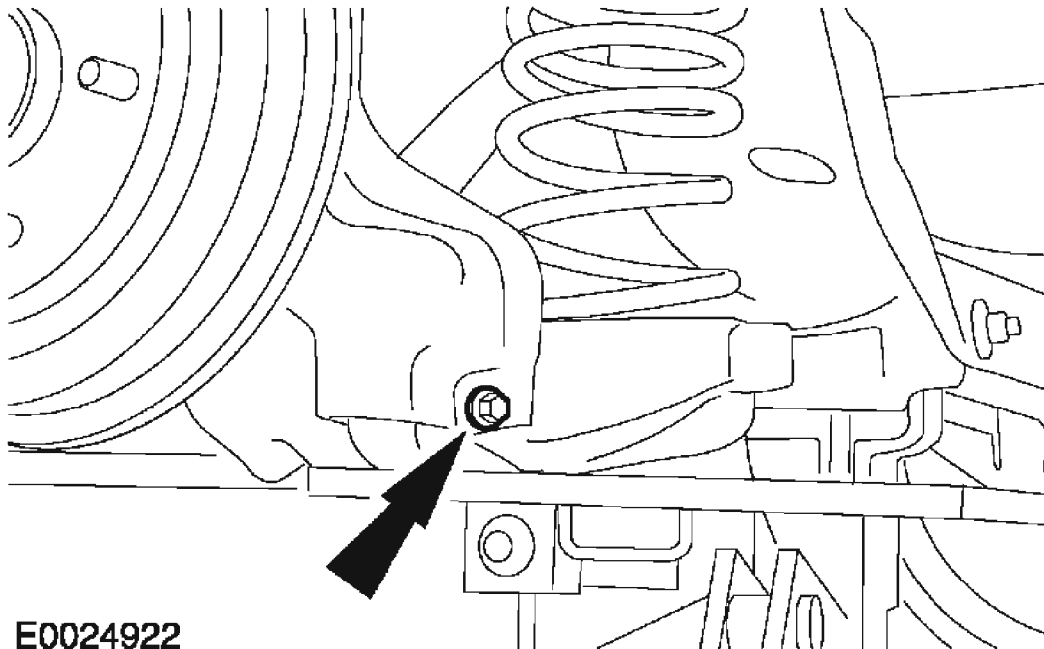


Fig. 107: Raising Rear Lower Arm Using Suitable Transmission Jack
Courtesy of FORD MOTOR CO.

WARNING: The spring is under extreme tension; care must be taken at all times. Failure to follow this instruction may result in personal injury.



E0024922

Fig. 108: Detaching Rear Lower Arm From Wheel Knuckle
Courtesy of FORD MOTOR CO.

4. Detach the rear lower arm from the wheel knuckle.
5. Lower the rear lower arm.
 - Lower and remove the transmission jack.

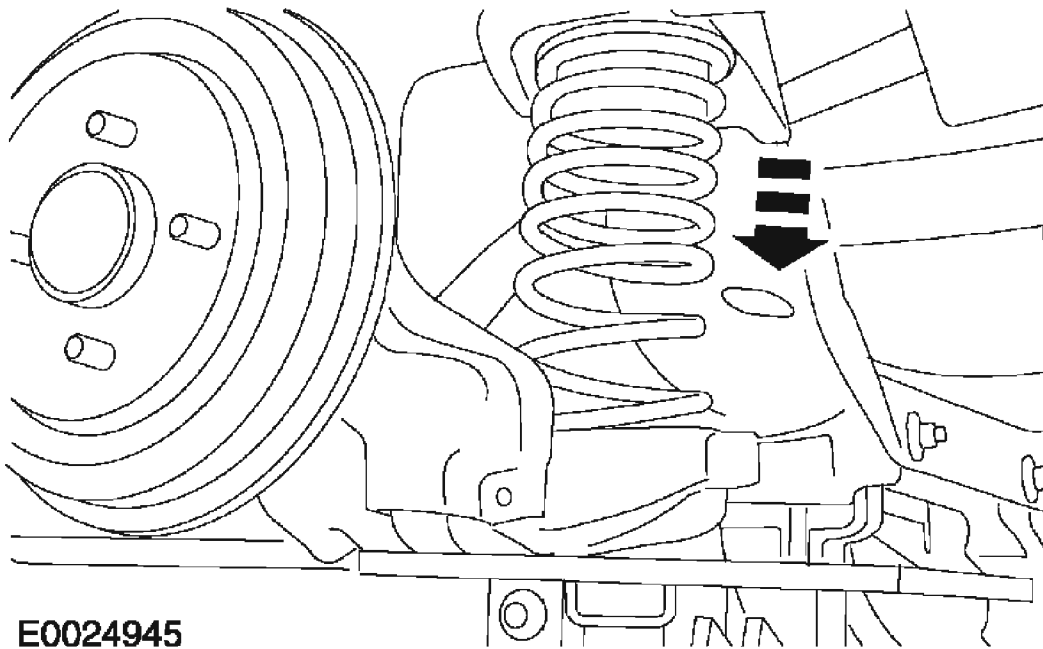


Fig. 109: Lowering Rear Lower Arm
Courtesy of FORD MOTOR CO.

6. With the aid of another technician, remove the spring.
 1. Pull the stabilizer bar away from the rear lower arm.
 2. Lower the rear lower arm.

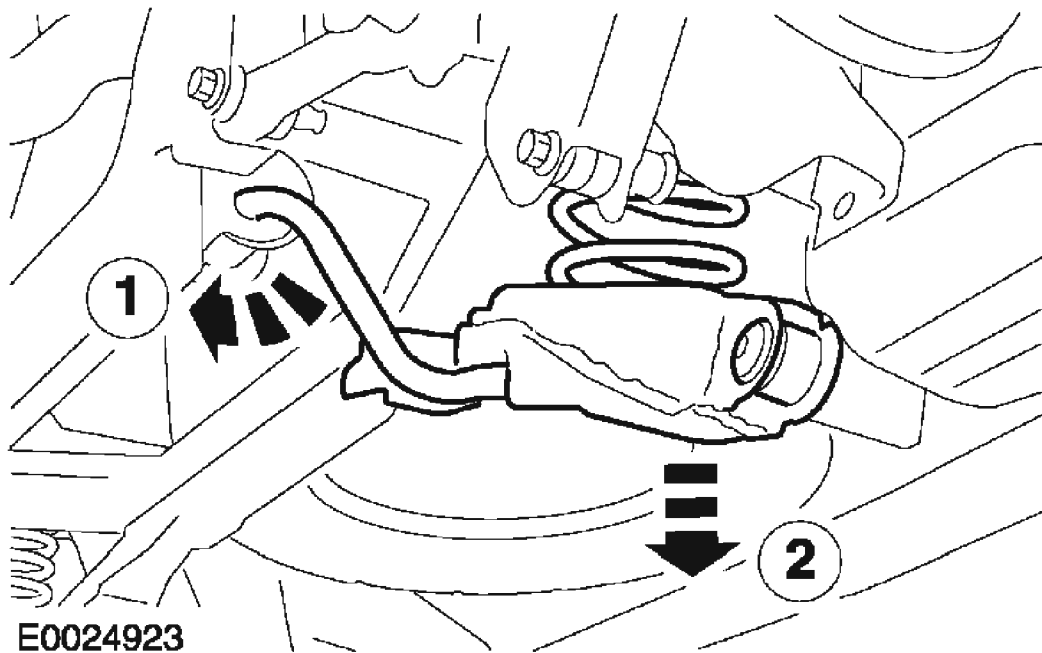


Fig. 110: Pulling Stabilizer Bar Away From Rear Lower Arm And Lowering Rear Lower Arm

Courtesy of FORD MOTOR CO.

Installation

CAUTION: Make sure the top seat mounting is installed, and the spring ends butt correctly against the upper and lower spring seats.

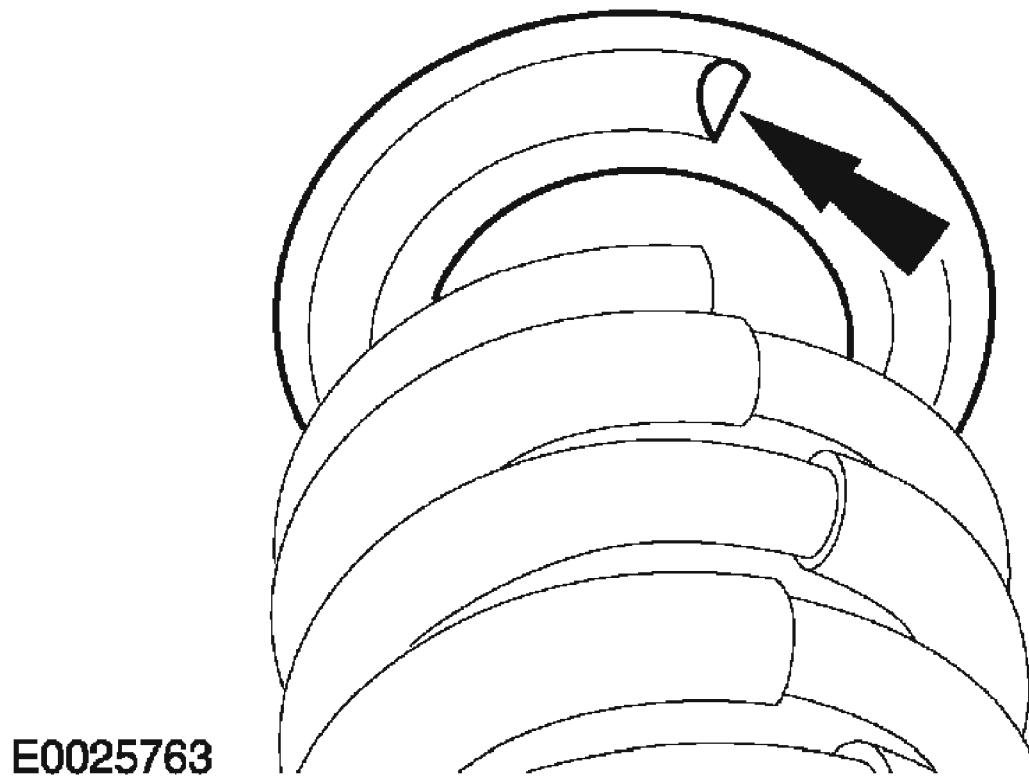


Fig. 111: Installing Top Spring Mounting Onto Spring
Courtesy of FORD MOTOR CO.

1. Install the top spring mounting onto the spring.
2. With the aid of another technician, install the spring.
 1. Pull the stabilizer bar away from the rear lower arm.
 2. Raise the rear lower arm.

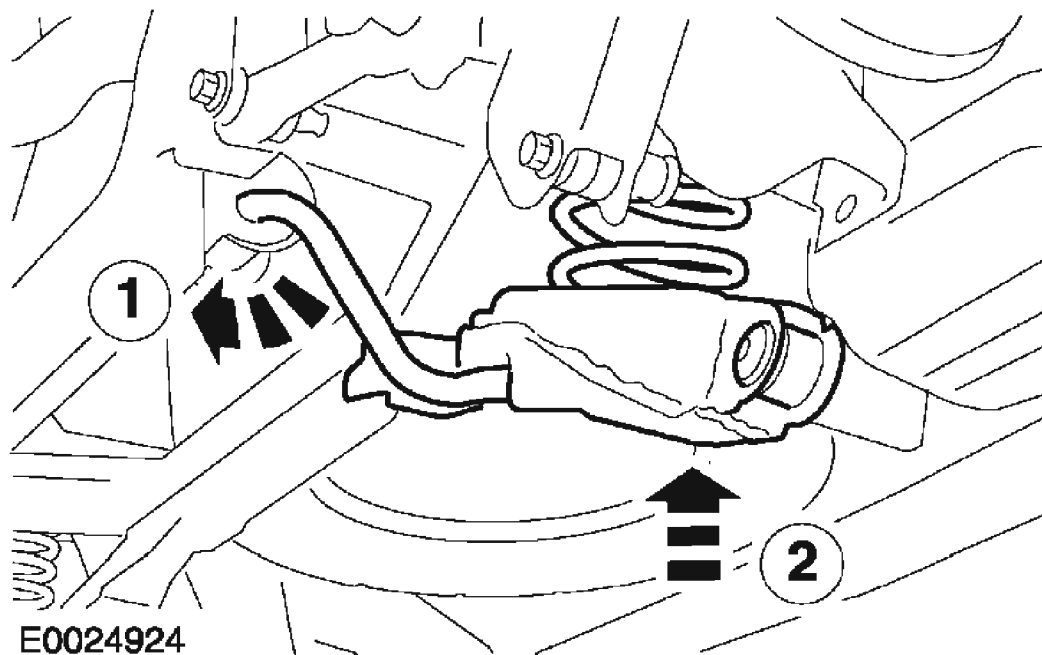


Fig. 112: Pulling Stabilizer Bar Away From Rear Lower Arm And Raising Rear Lower Arm

Courtesy of FORD MOTOR CO.

CAUTION: Make sure the spring butts against the rear lower arm spring stop and is visible through the drain hole.

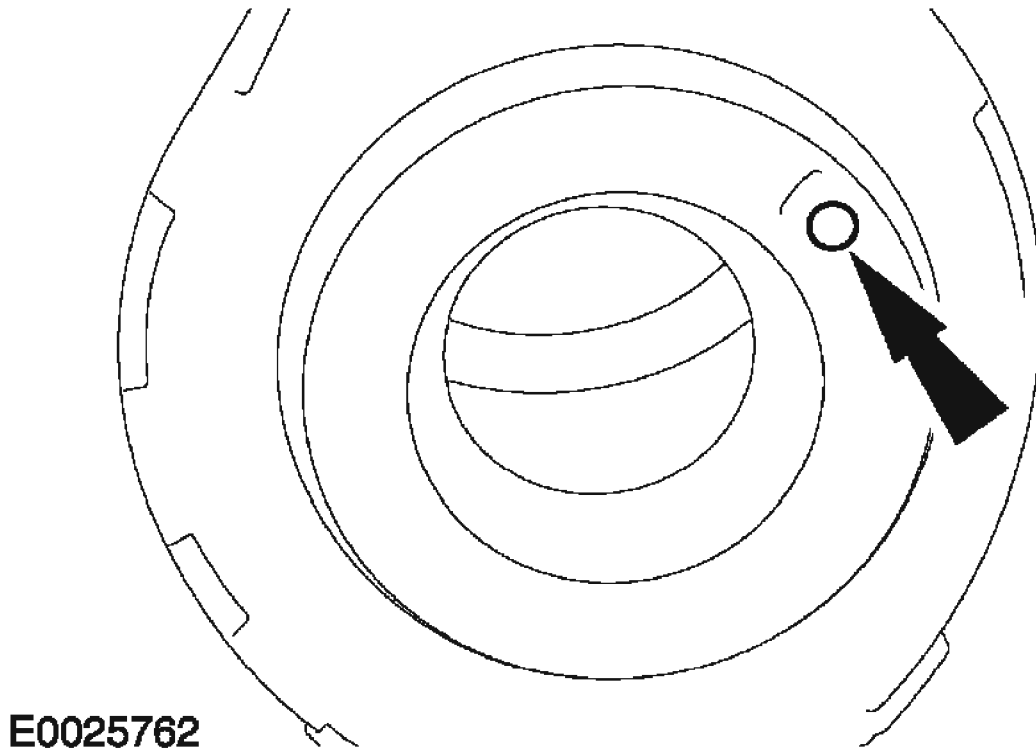


Fig. 113: Identifying Spring Butts Against Rear Lower Arm Spring Stop And Is Visible Through Drain Hole
Courtesy of FORD MOTOR CO.

3. Rotate the spring clockwise until the spring-end butts against the rear lower arm spring stop.

WARNING: The spring is under extreme tension; care must be taken at all times. Failure to follow this instruction may result in personal injury.

NOTE: Do not fully tighten the rear lower arm to wheel knuckle bolt at this stage.

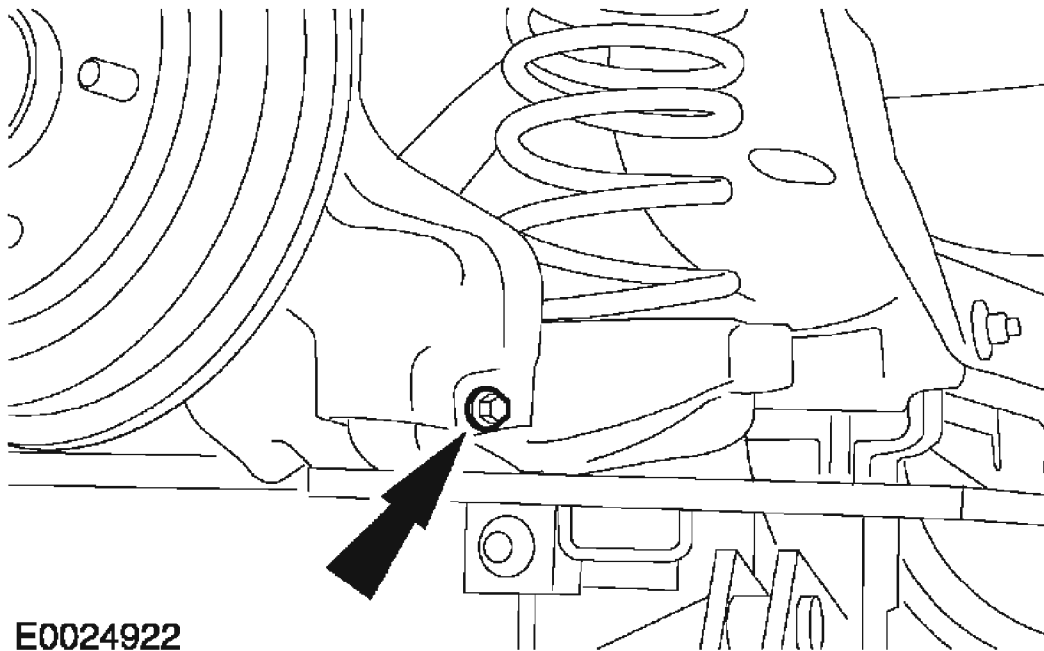


Fig. 114: Attaching Rear Lower Arm To Wheel Knuckle Using Suitable Transmission Jack
Courtesy of FORD MOTOR CO.

4. Using a suitable transmission jack, attach the rear lower arm to the wheel knuckle.
5. Using a suitable transmission jack, raise the rear lower arm 32 mm (1.25 inches).

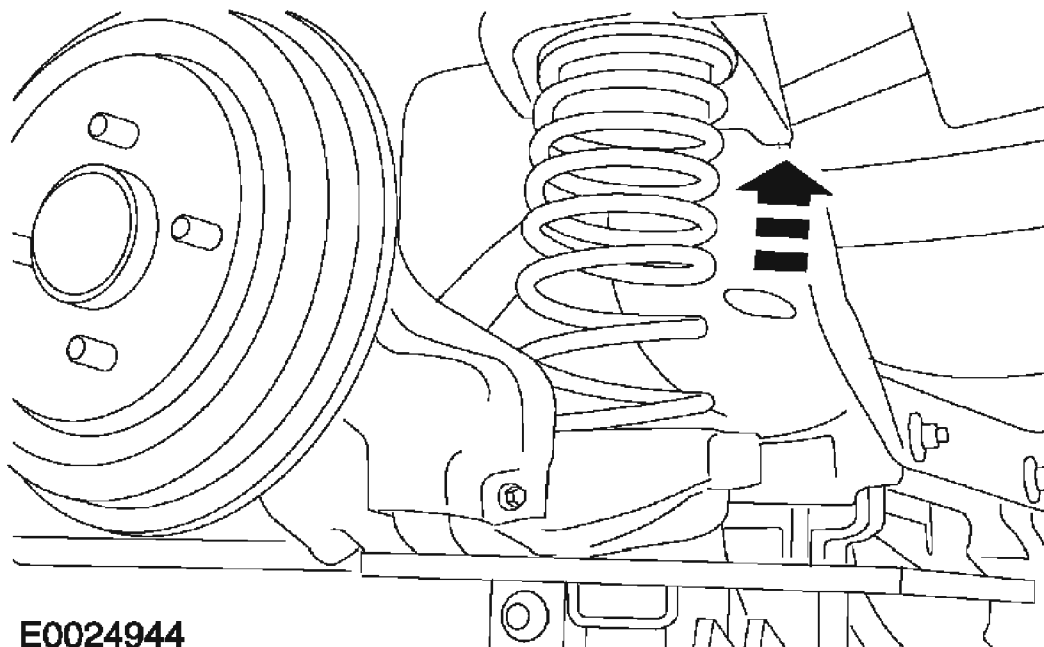


Fig. 115: Raising Rear Lower
Courtesy of FORD MOTOR CO.

6. Tighten the rear lower arm to wheel knuckle bolt.

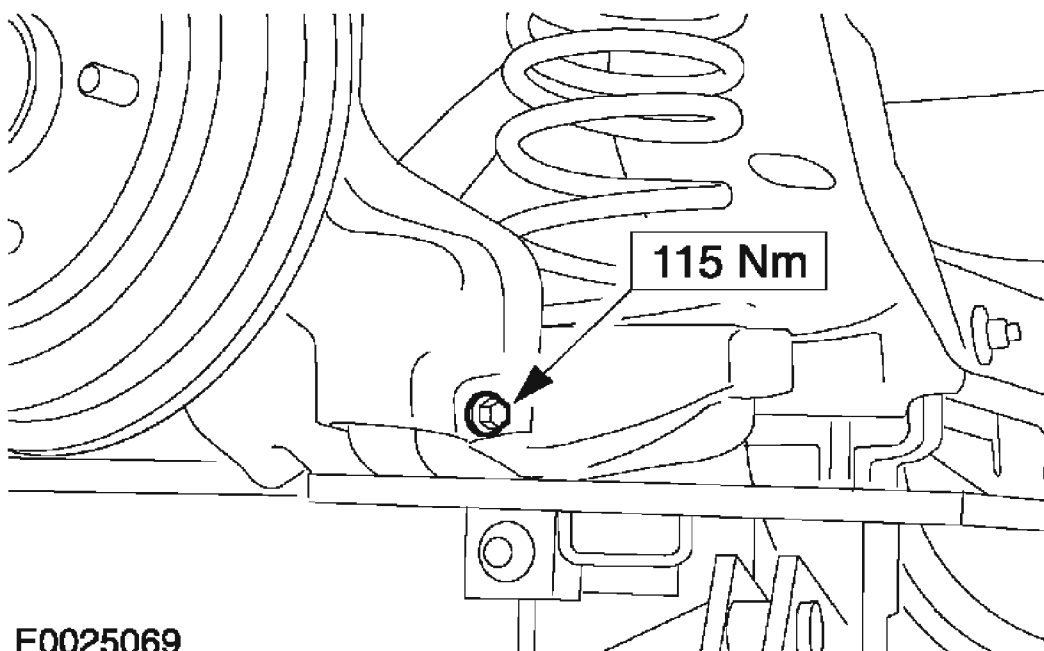


Fig. 116: Tightening Rear Lower Arm To Wheel Knuckle Bolt
Courtesy of FORD MOTOR CO.

7. Attach the stabilizer bar to the rear lower arms.

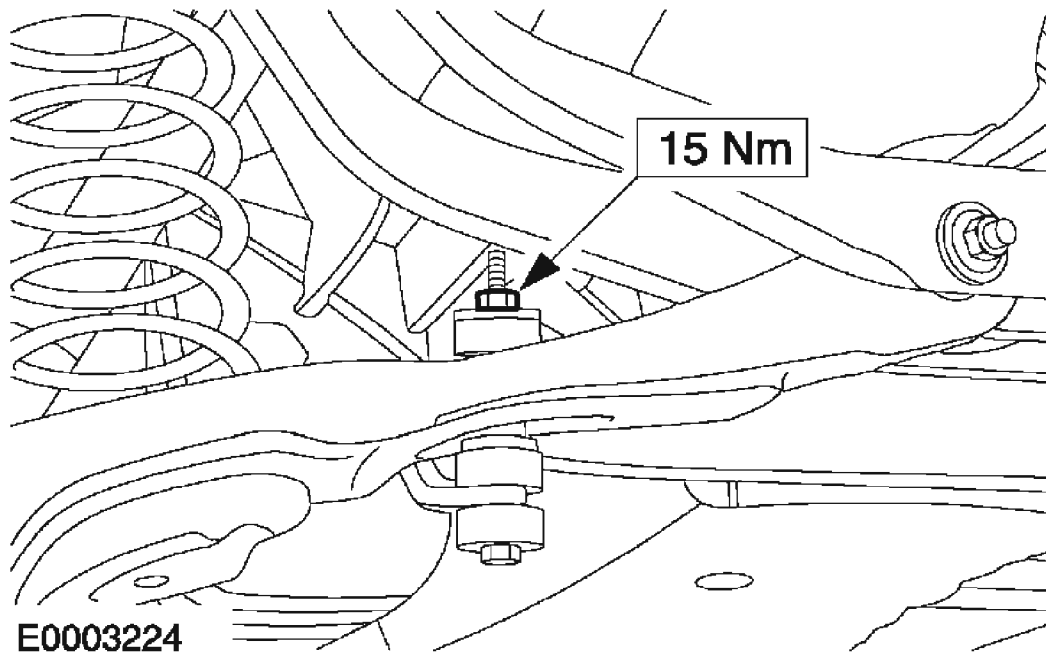


Fig. 117: Attaching Stabilizer Bar To Rear Lower Arms
Courtesy of FORD MOTOR CO.

8. Install the rear wheel and tire. For additional information, refer to **WHEELS AND TIRES**.

CROSSMEMBER

Removal

All vehicles

1. Remove the springs. For additional information, refer to **SPRING** or **SPRING - WAGON**.

3-door, 4-door and 5-door

2. Detach the stabilizer bar from the rear lower arm on both sides.

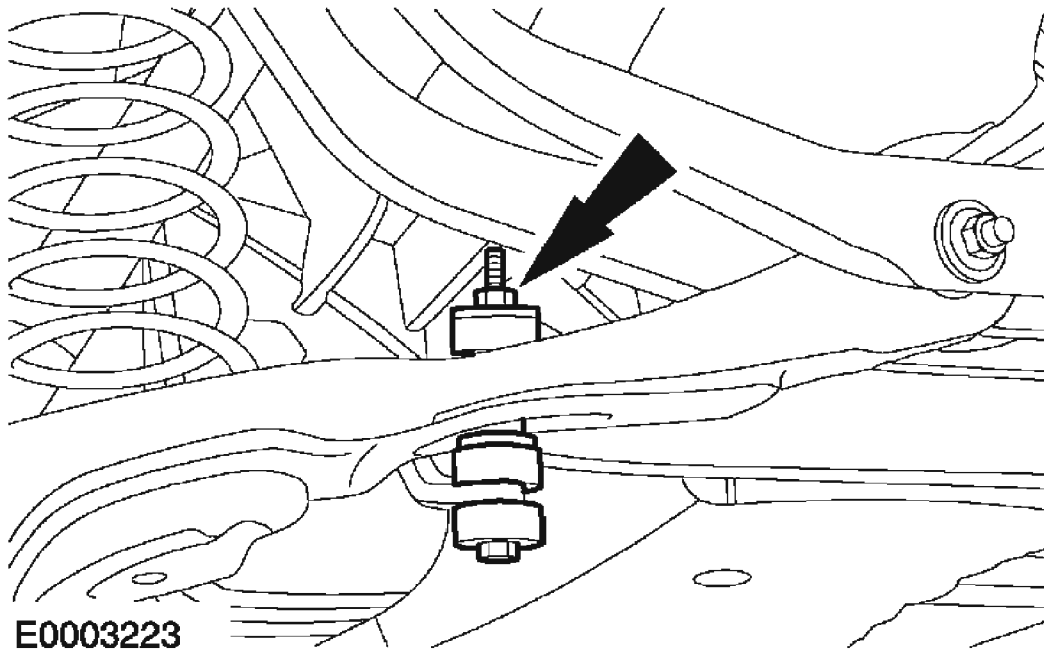


Fig. 118: Detaching Stabilizer Bar From Rear Lower Arm
Courtesy of FORD MOTOR CO.

All vehicles

3. Remove the stabilizer bar (two bolts each side).

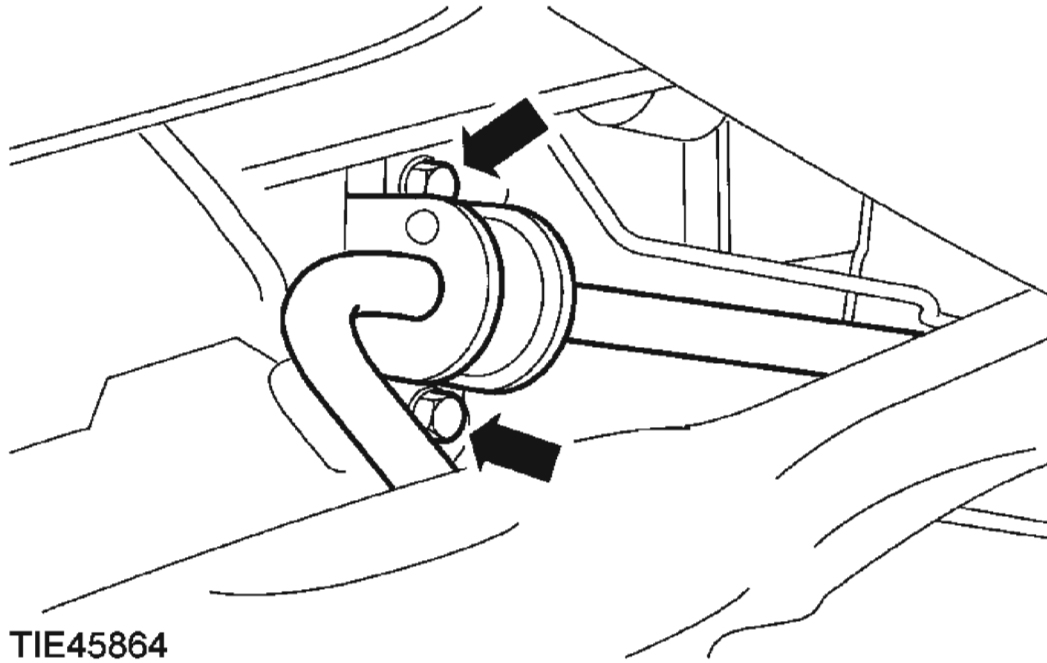


Fig. 119: Removing Stabilizer Bar
Courtesy of FORD MOTOR CO.

4. Mark the position of the rear lower arm adjustment cam to the crossmember.

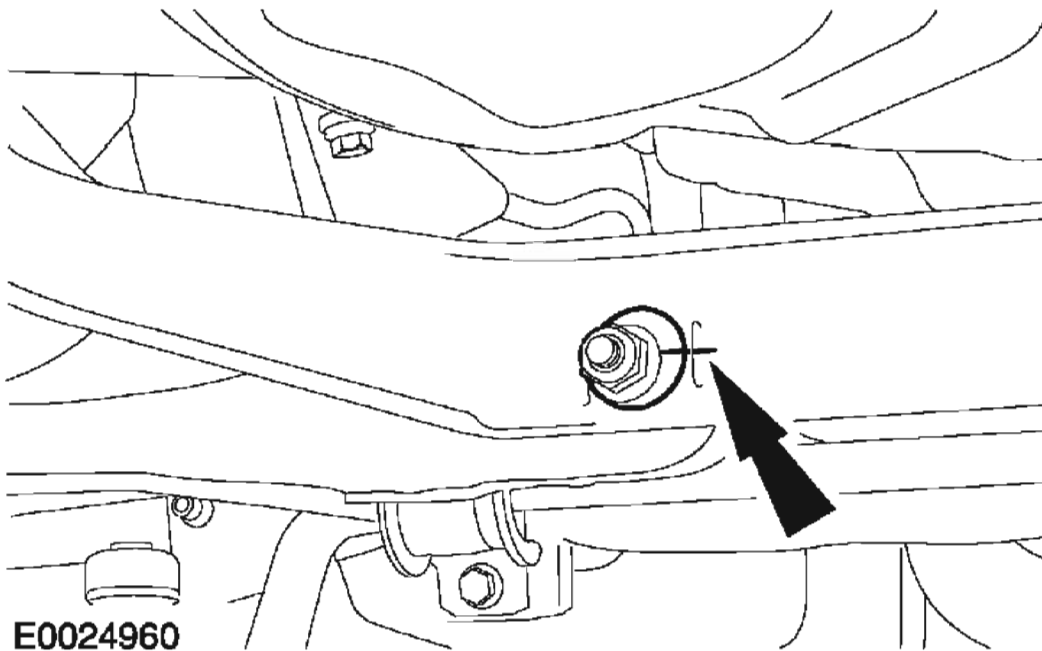
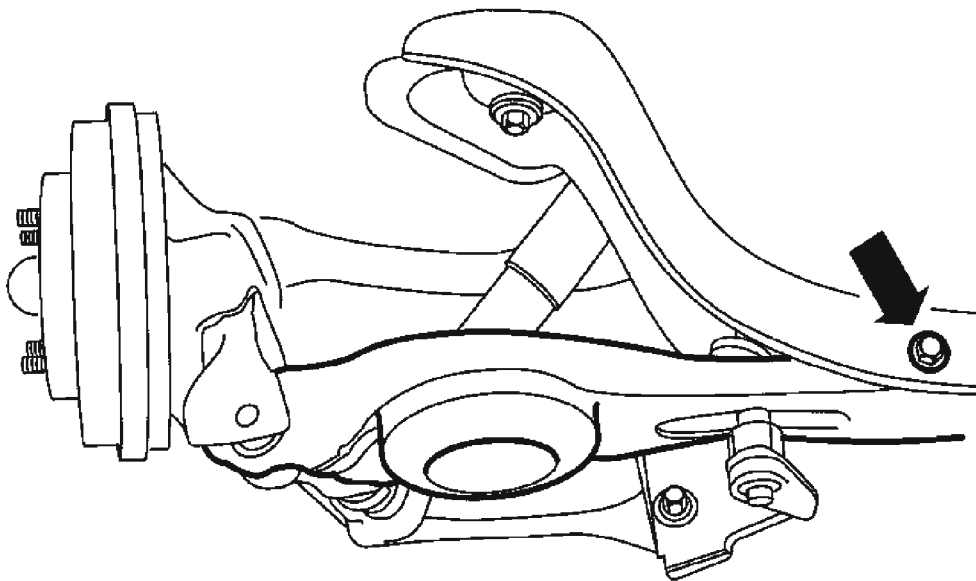


Fig. 120: Marking Position Of Rear Lower Arm Adjustment Cam To Crossmember

Courtesy of FORD MOTOR CO.

Wagon

5. Remove the rear lower arms.



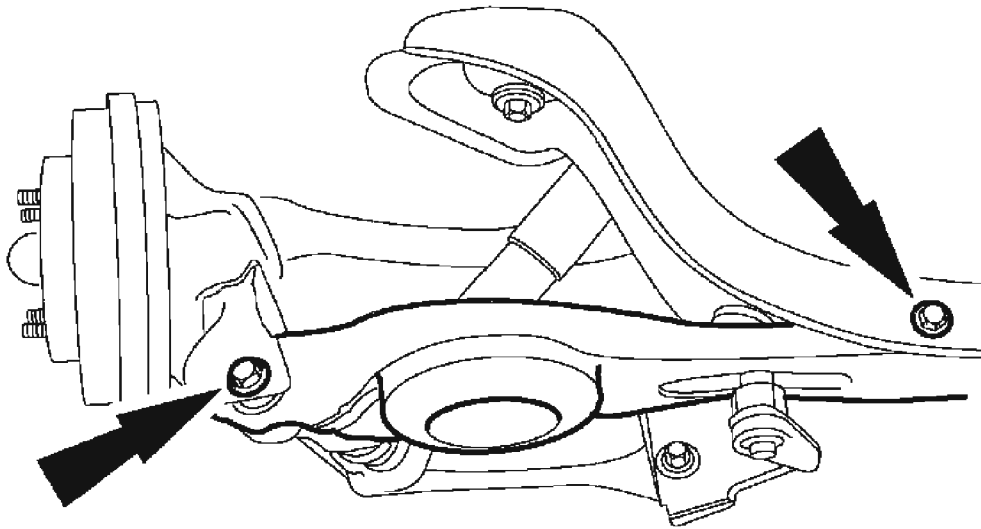
TIE45643

Fig. 121: Removing Rear Lower Arms

Courtesy of FORD MOTOR CO.

3-door, 4-door and 5-door

6. Remove the rear lower arms.



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Fig. 122: Removing Rear Lower Arms
Courtesy of FORD MOTOR CO.

All vehicles

CAUTION: The front lower arm is marked FRONT. Make a note of the position of the front lower arm to aid installation.

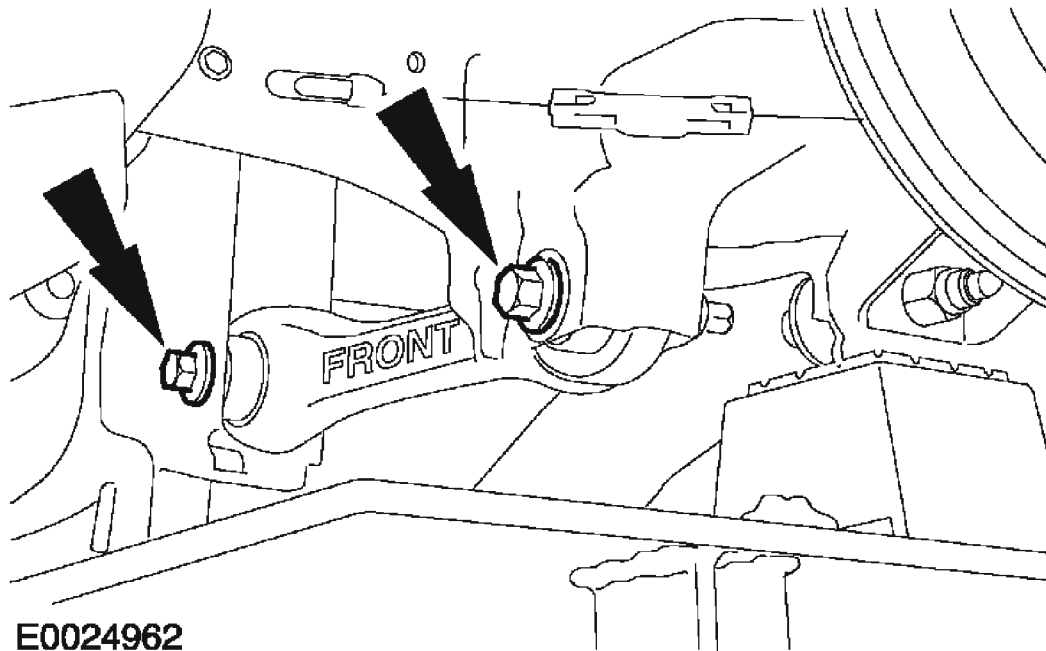
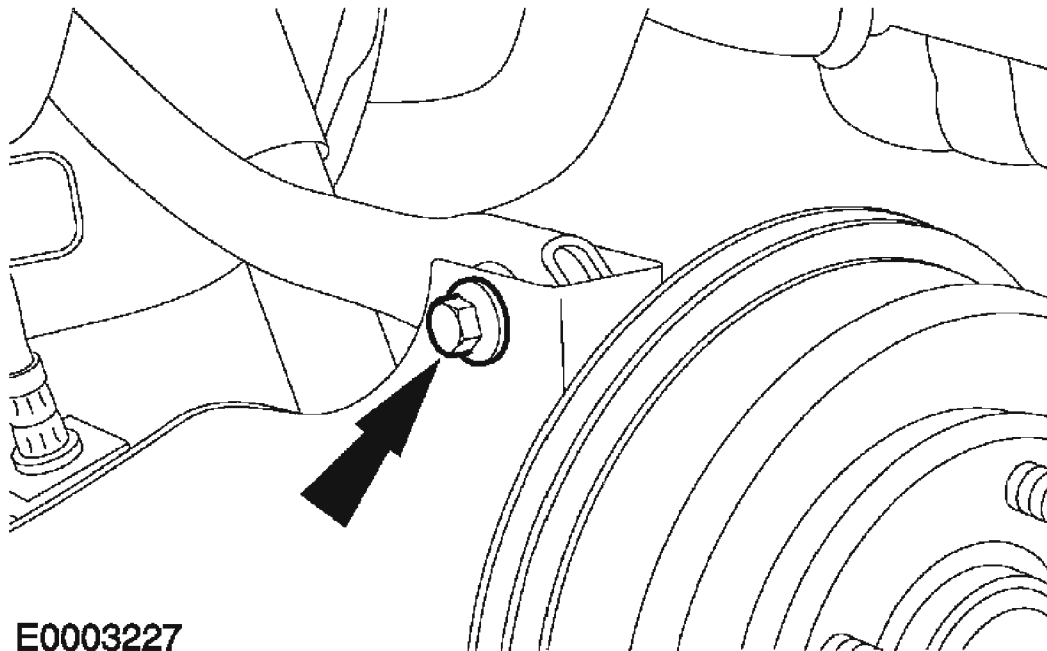


Fig. 123: Removing Front Lower Arms
Courtesy of FORD MOTOR CO.

7. Remove the front lower arms.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.



E0003227

Fig. 124: Detaching Upper Arms From Wheel Knuckles
Courtesy of FORD MOTOR CO.

8. Detach the upper arms from the wheel knuckles.

NOTE: **Make a note of the position of the upper arms to aid installation.**

NOTE: **Wagon shown, 3-door, 4-door and 5-door similar.**

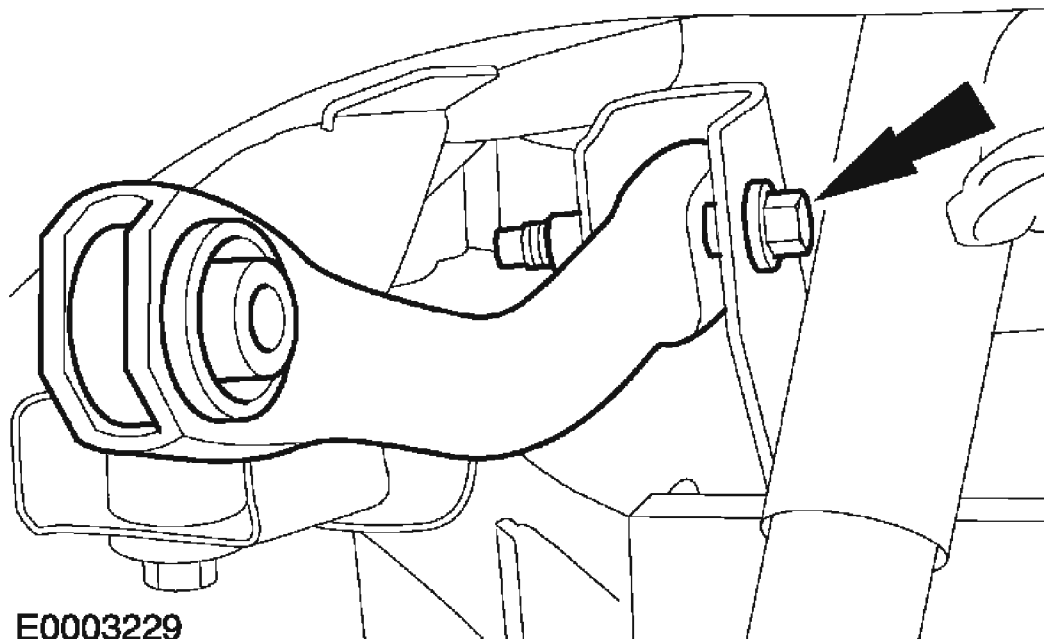


Fig. 125: Removing Upper Arms
Courtesy of FORD MOTOR CO.

9. Remove the upper arms.

CAUTION: Support the wheel knuckle to prevent damage.

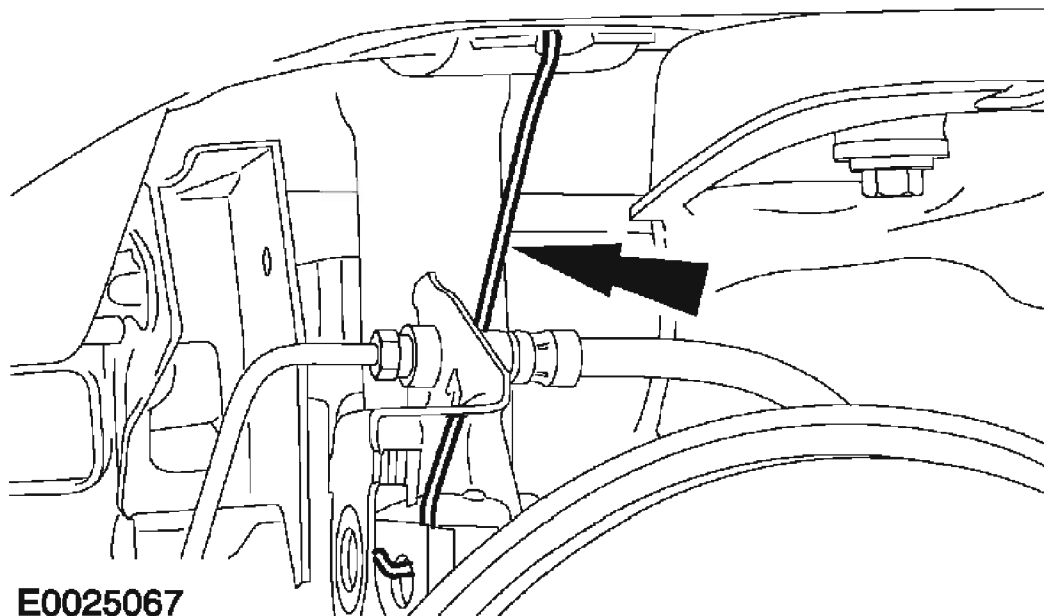


Fig. 126: Supporting Wheel Knuckle Using Suitable Cable Tie
Courtesy of FORD MOTOR CO.

10. Using a suitable cable tie, support the wheel knuckle.
11. Lower and remove the transmission jack.

NOTE: **Support the exhaust system with a suitable axle stand.**

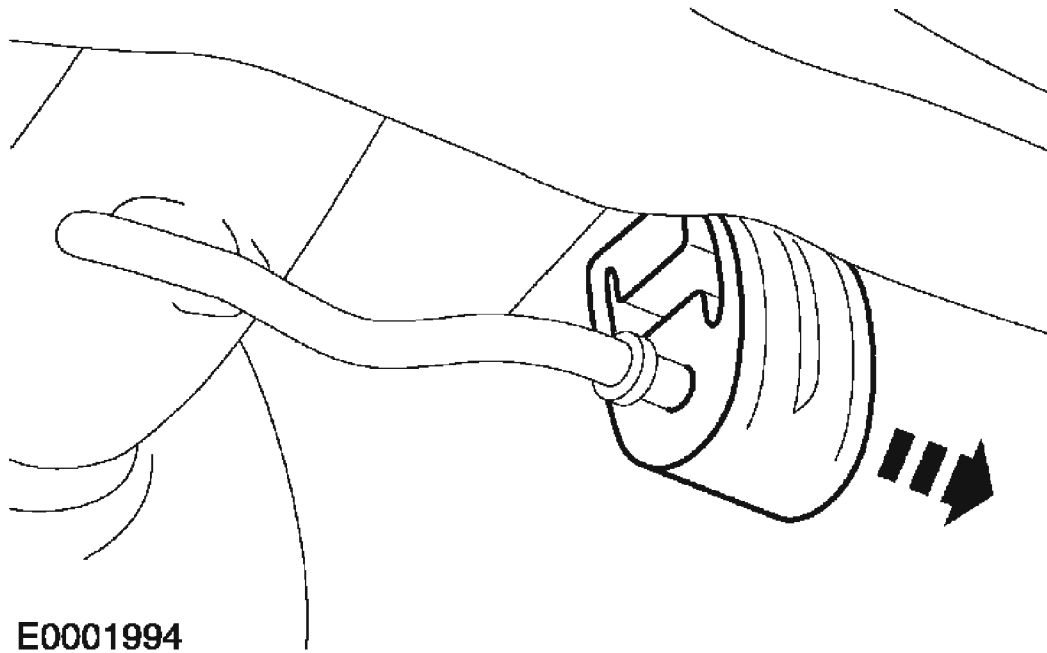


Fig. 127: Detaching Exhaust System From Crossmember Exhaust Hanger Insulator

Courtesy of FORD MOTOR CO.

12. Detach the exhaust system from the crossmember exhaust hanger insulator.
 - Lower the exhaust system to give sufficient clearance from the crossmember.
13. Using a suitable transmission jack, support the crossmember.
14. Remove the crossmember (three bolts each side).

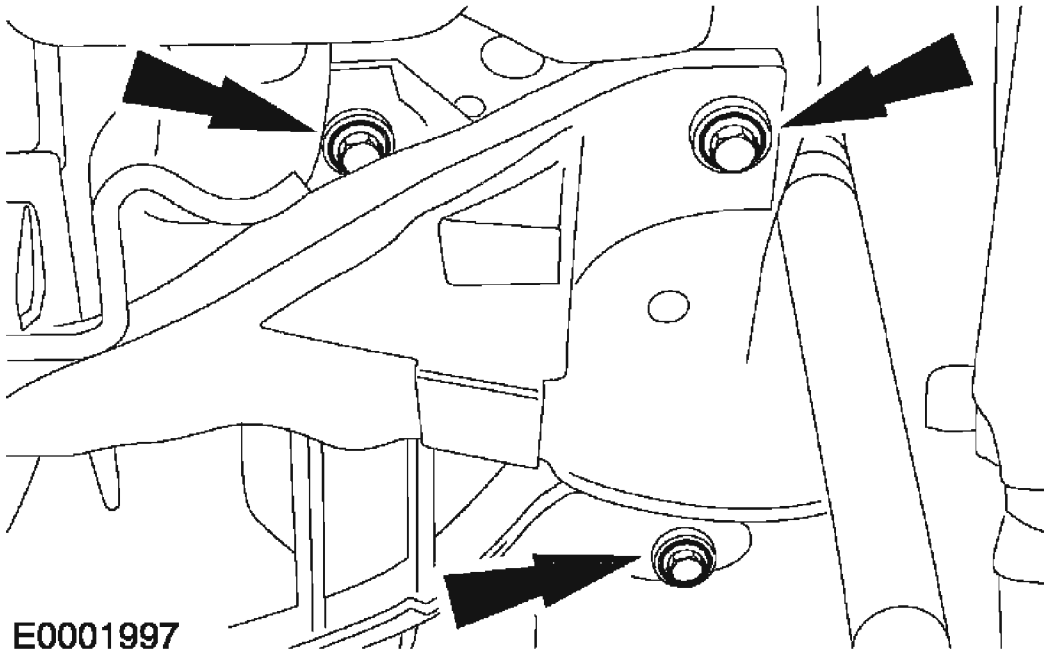


Fig. 128: Removing Crossmember (Three Bolts Each Side)
Courtesy of FORD MOTOR CO.

Installation

All vehicles

1. Using a suitable transmission jack, locate the crossmember.

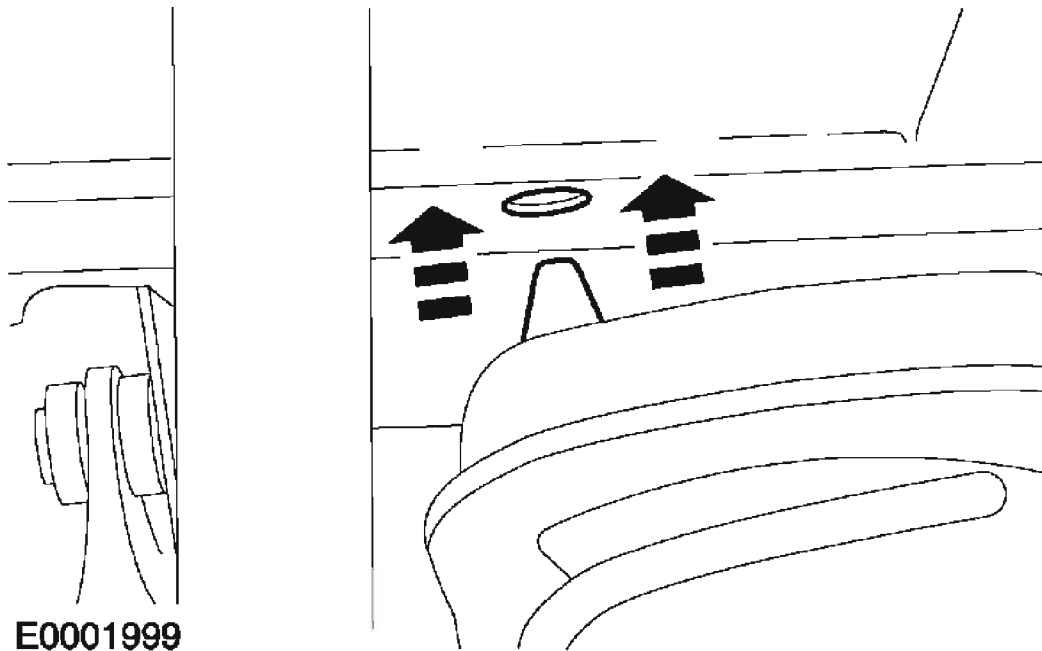


Fig. 129: Locating Crossmember
Courtesy of FORD MOTOR CO.

2. Install the crossmember (three bolts each side).

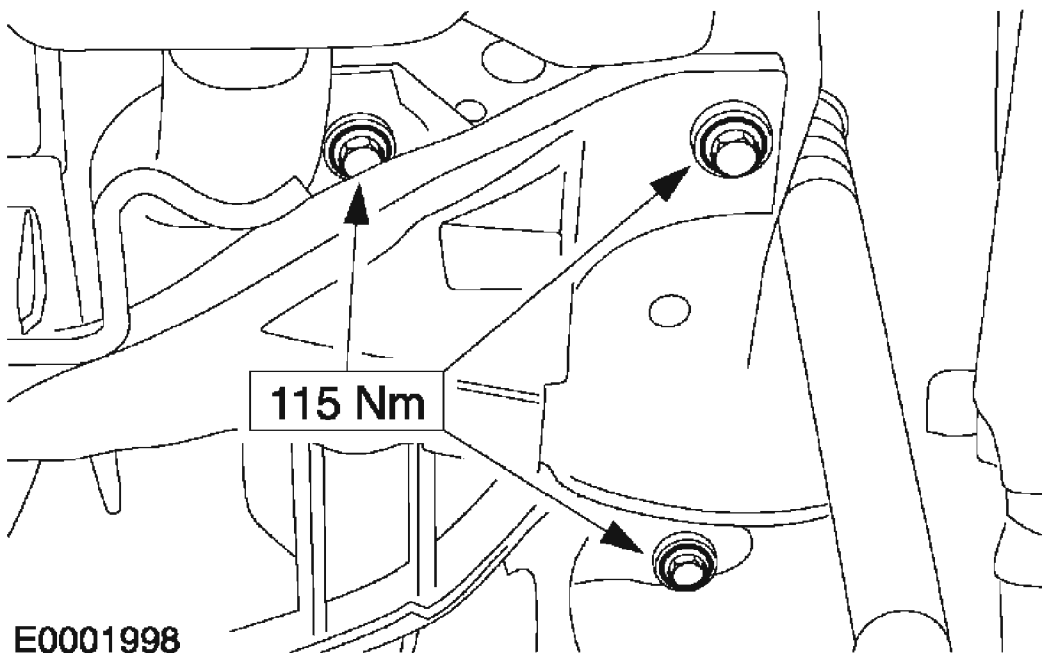


Fig. 130: Installing Crossmember (Three Bolts Each Side)
Courtesy of FORD MOTOR CO.

3. Lower and remove the transmission jack.
4. Attach the exhaust system to the crossmember exhaust hanger insulator.
 - Remove the axle stand.

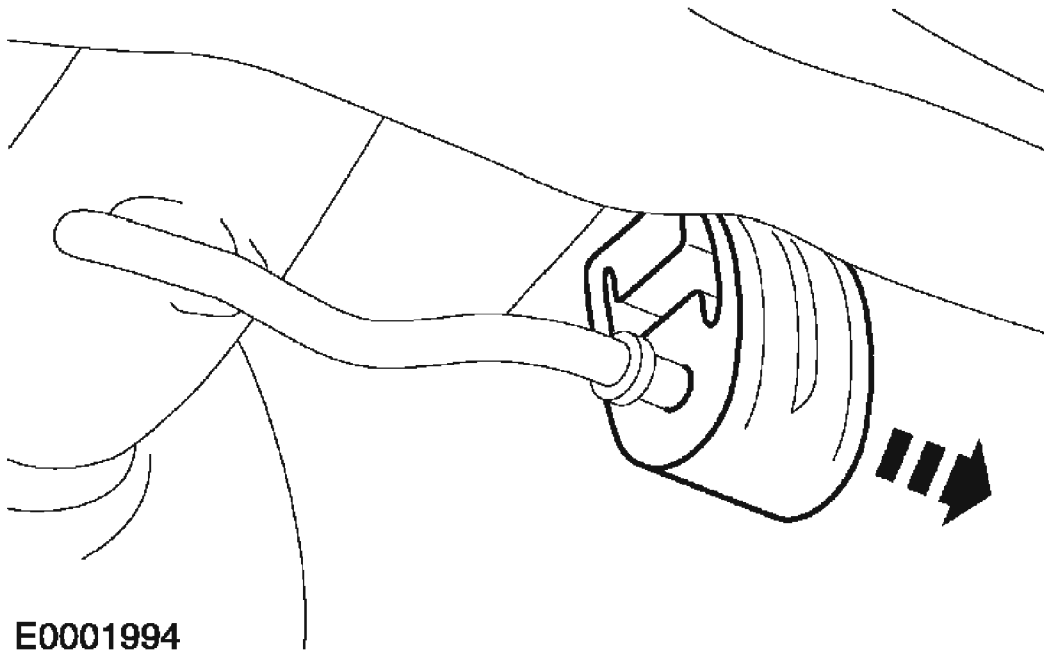


Fig. 131: Attaching Exhaust System To Crossmember Exhaust Hanger Insulator
Courtesy of FORD MOTOR CO.

NOTE: Do not fully tighten the upper arm retaining bolts at this stage.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.

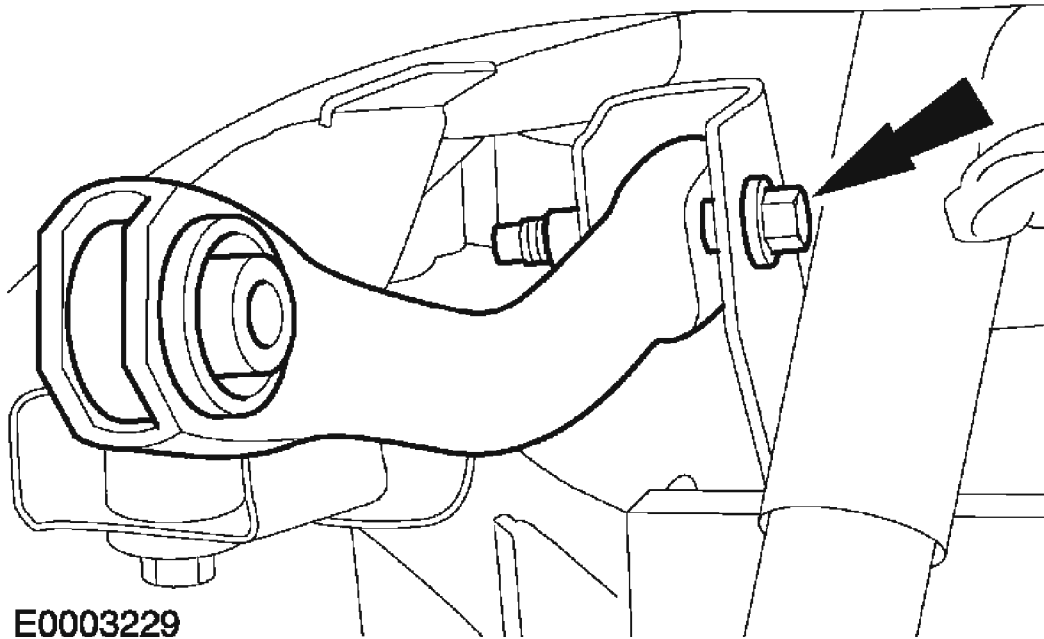


Fig. 132: Installing Upper Arms
Courtesy of FORD MOTOR CO.

5. Install the upper arms.

NOTE: Do not fully tighten the upper arm-to-wheel knuckle retaining bolts at this stage.

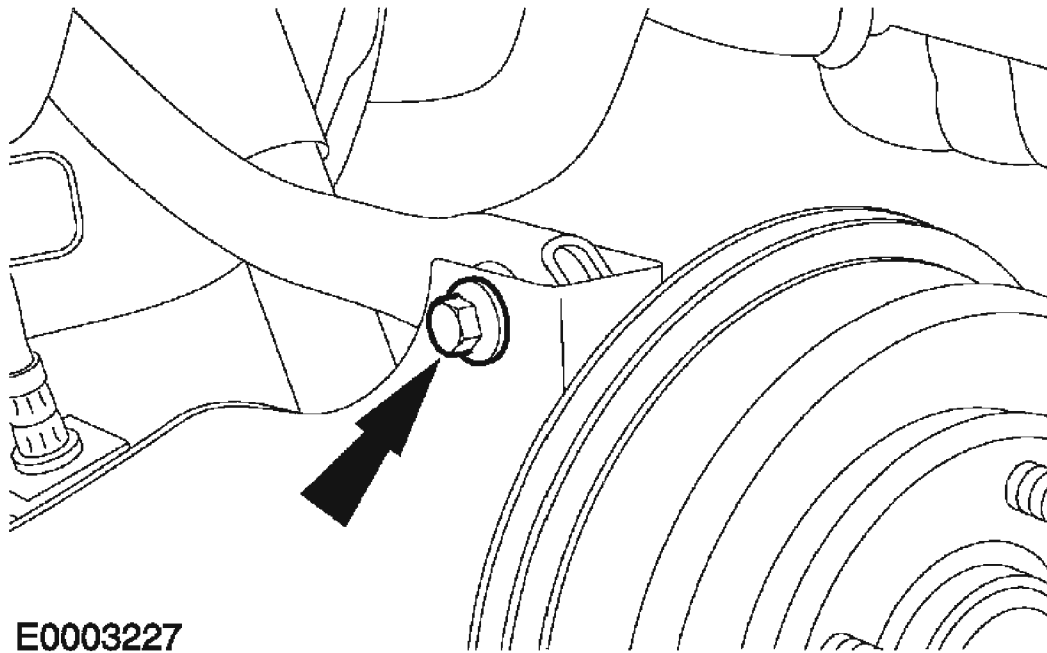


Fig. 133: Attaching Upper Arms To Wheel Knuckles
Courtesy of FORD MOTOR CO.

6. Attach the upper arms to the wheel knuckles.

NOTE: Do not fully tighten the front lower arm retaining bolts at this stage.

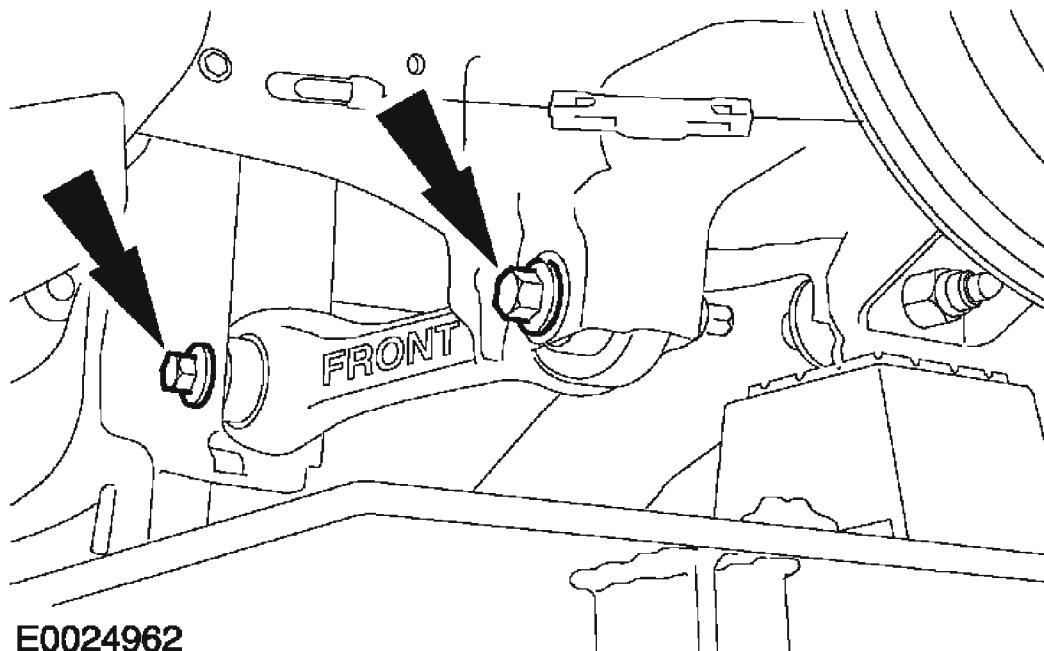


Fig. 134: Installing Front Lower Arms
Courtesy of FORD MOTOR CO.

7. Install the front lower arms.

NOTE: Align the mark on the rear lower arm adjustment cam to the mark on the crossmember.

NOTE: Do not fully tighten the rear lower arm adjustment cam nut at this stage.

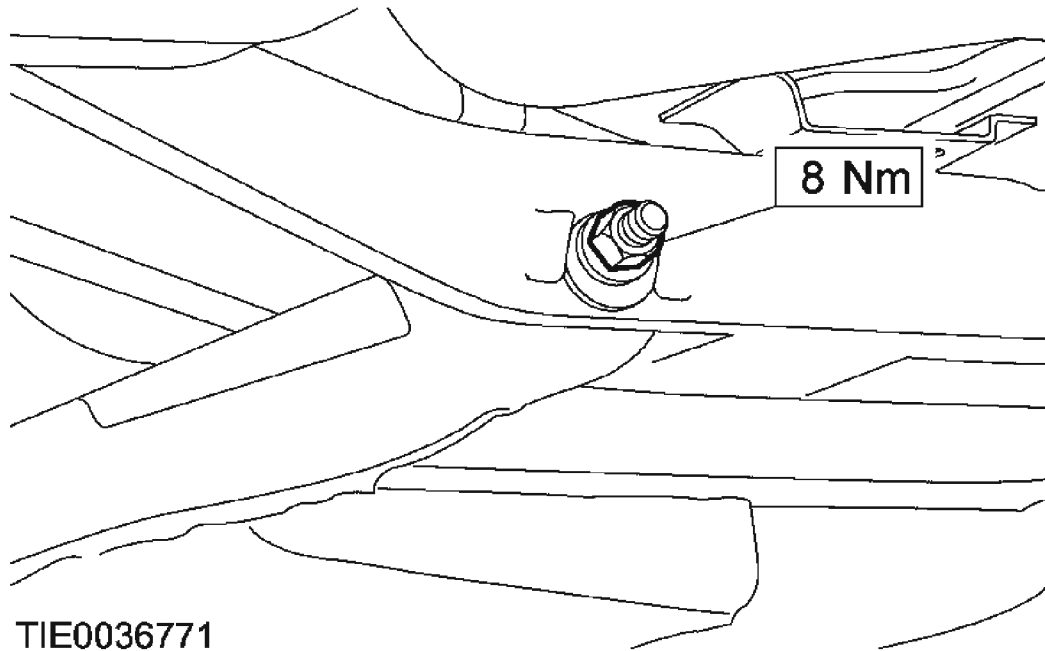


Fig. 135: Installing Rear Lower Arm
Courtesy of FORD MOTOR CO.

8. Install the rear lower arm.
9. Install the stabilizer bar (two bolts each side).

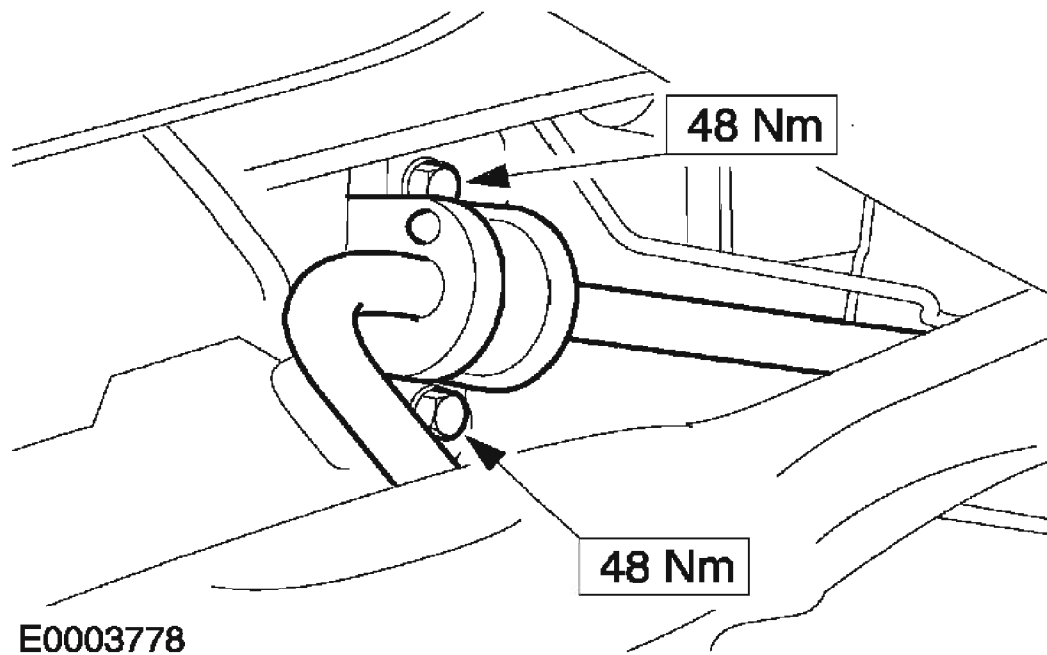


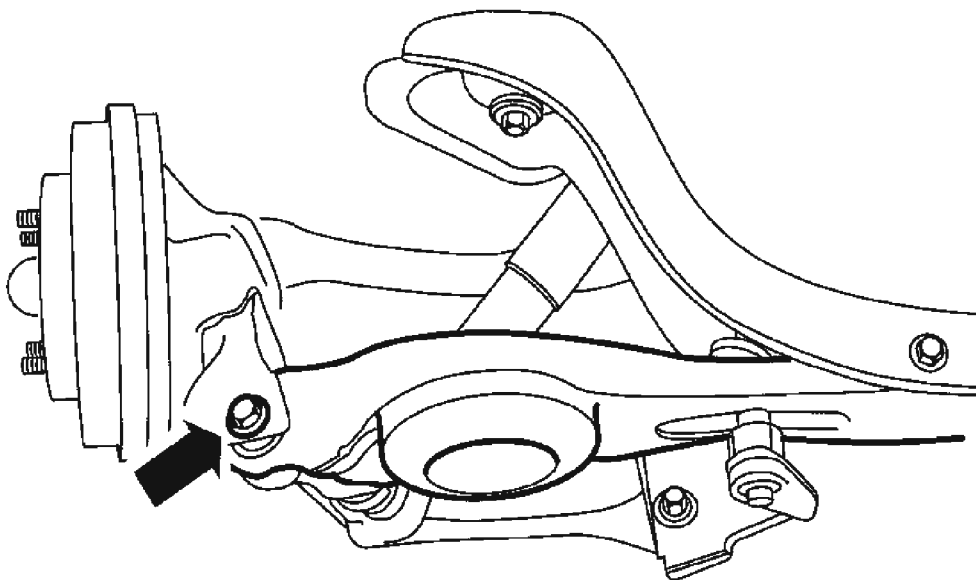
Fig. 136: Installing Stabilizer Bar (Two Bolts Each Side)
Courtesy of FORD MOTOR CO.

Wagon

10. Install the springs. For additional information, refer to **SPRING - WAGON**.

3-door, 4-door and 5-door

NOTE: Do not fully tighten the rear lower arm retaining bolts at this stage.



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Fig. 137: Attaching Rear Lower Arms To Wheel Knuckles
Courtesy of FORD MOTOR CO.

11. Attach the rear lower arms to the wheel knuckles.
12. Attach the stabilizer bar to the rear lower arms.

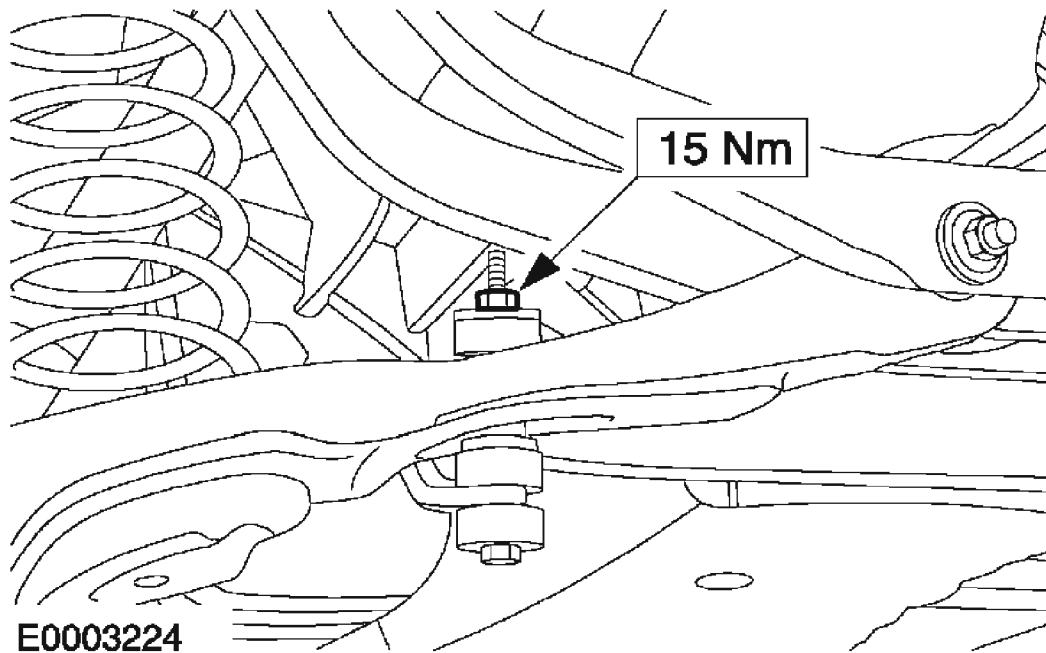


Fig. 138: Attaching Stabilizer Bar To Rear Lower Arms
Courtesy of FORD MOTOR CO.

13. Install the springs. For additional information, refer to **Spring**.

All vehicles

NOTE: Final tightening of the rear suspension components should be carried out at or near curb height. Load suspension to achieve this.

NOTE: Wagon shown, 3-door, 4-door and 5-door similar.

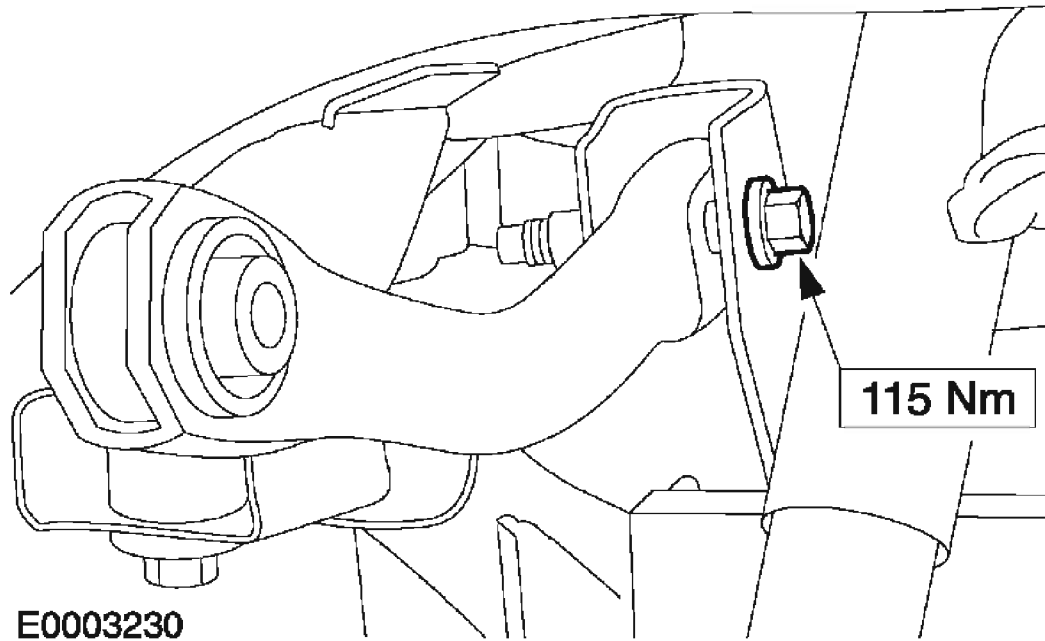


Fig. 139: Tightening Upper Arms-To-Crossmember Retaining Bolts
Courtesy of FORD MOTOR CO.

14. Tighten the upper arms-to-crossmember retaining bolts on both sides.
15. Tighten the upper arm-to-wheel knuckle retaining bolts on both sides.

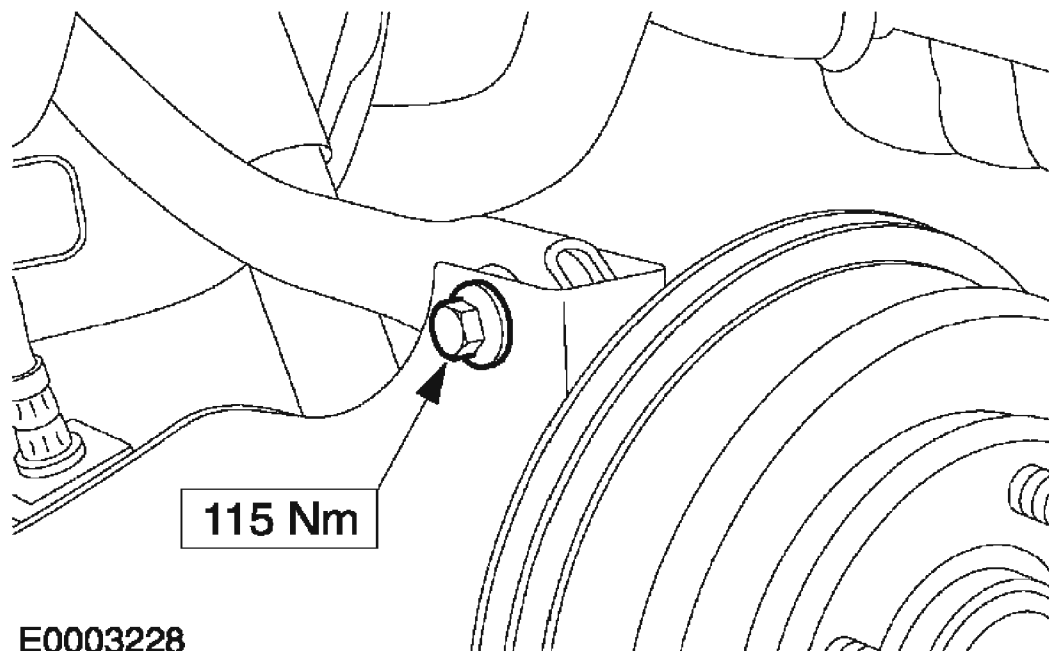


Fig. 140: Tightening Upper Arm-To-Wheel Knuckle Retaining Bolts
Courtesy of FORD MOTOR CO.

16. Tighten the front lower arm retaining bolts on both sides.

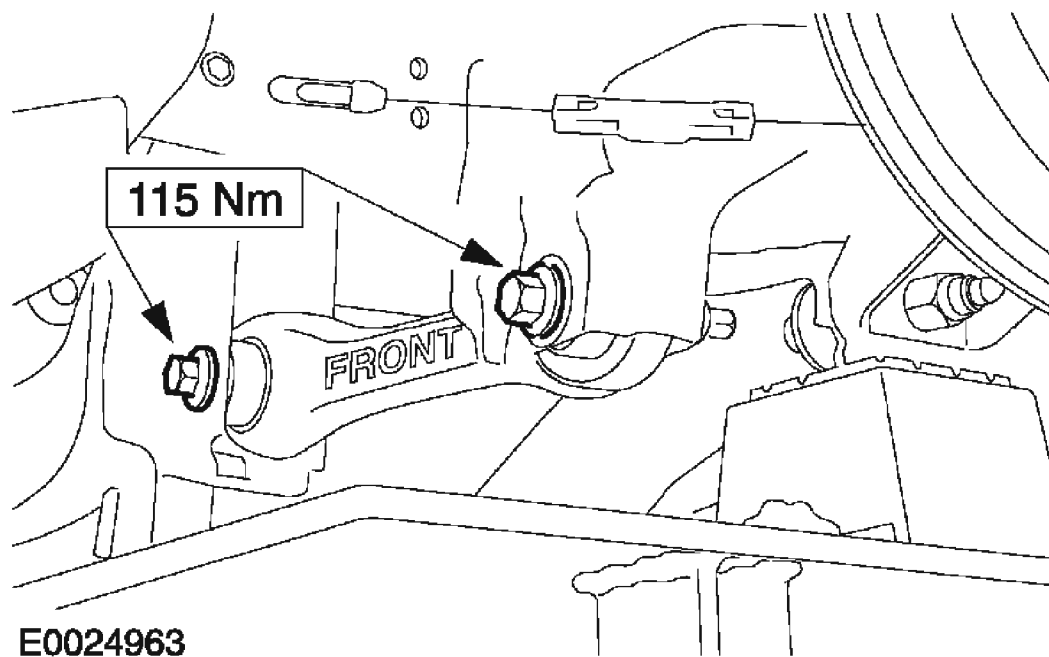
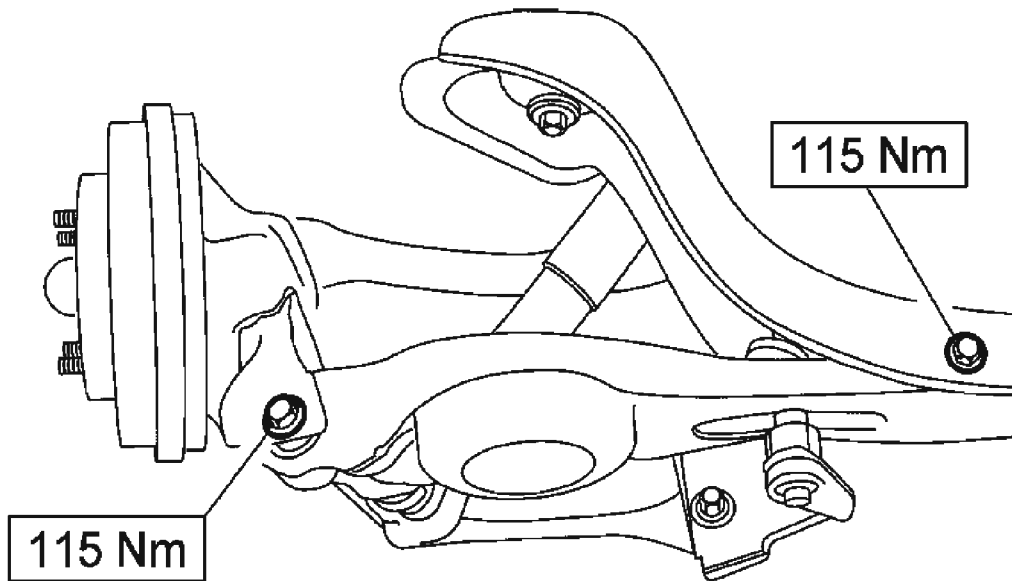


Fig. 141: Tightening Front Lower Arm Retaining Bolts
Courtesy of FORD MOTOR CO.

17. Tighten the rear lower arm adjustment cam nuts and rear lower arm-to-wheel knuckle retaining bolts on both sides.



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Fig. 142: Identifying Rear Lower Arm Adjustment Cam Nuts And Rear Lower Arm-To-Wheel Knuckle Retaining Bolts & Torque Specifications
Courtesy of FORD MOTOR CO.

18. Check the toe setting and adjust as necessary. For additional information, refer to **SPECIFICATIONS** and **REAR TOE ADJUSTMENT**.