

## 2004 Cadillac Escalade

2004 SUSPENSION Rear Suspension - C/K SUV

### 2004 SUSPENSION

#### Rear Suspension - C/K SUV

## SPECIFICATIONS

### FASTENER TIGHTENING SPECIFICATIONS

#### Fastener Tightening Specifications

| Application                                             | Specification |           |
|---------------------------------------------------------|---------------|-----------|
|                                                         | Metric        | English   |
| Jounce Bumper Mounting Bolt                             | 32 N.m        | 24 lb ft  |
| Lower Control Arm Bolt                                  | 120 N.m       | 89 lb ft  |
| Shackle to Frame Bracket Nut                            | 95 N.m        | 70 lb ft  |
| Shackle to Spring Nut                                   | 95 N.m        | 70 lb ft  |
| Shock Absorber Nuts                                     | 95 N.m        | 70 lb ft  |
| Spring to Front Hanger Nut                              | 150 N.m       | 110 lb ft |
| Stabilizer Shaft Insulator Clamp Bolts                  | 33 N.m        | 24 lb ft  |
| Stabilizer Shaft Link Nuts                              | 65 N.m        | 48 lb ft  |
| Track Bar Bolt                                          | 105 N.m       | 77 lb ft  |
| U-bolt Nut, 25 series without rear wheel steering       | 72 N.m        | 53 lb ft  |
| U-bolt Nut, All 25 series including rear wheel steering | 150 N.m       | 110 lb ft |
| Upper Control Arm Bolt                                  | 105 N.m       | 77 lb ft  |

## REPAIR INSTRUCTIONS

### REAR AXLE UPPER CONTROL ARM REPLACEMENT

#### Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Disconnect the electronic suspension control (ESC) sensor, if equipped. Refer to **Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Right** in Electronic Suspension Control (ESC).

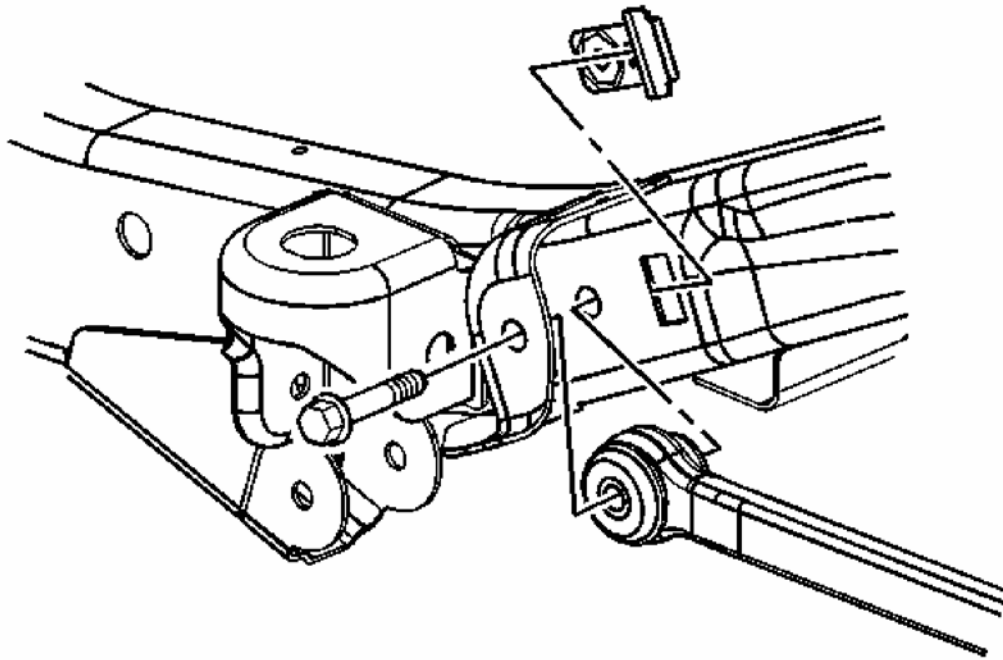


**Fig. 1: Upper Control Arm-To-Frame Bracket Retaining Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

3. Remove the upper control arm retaining nut and bolt from the frame bracket.

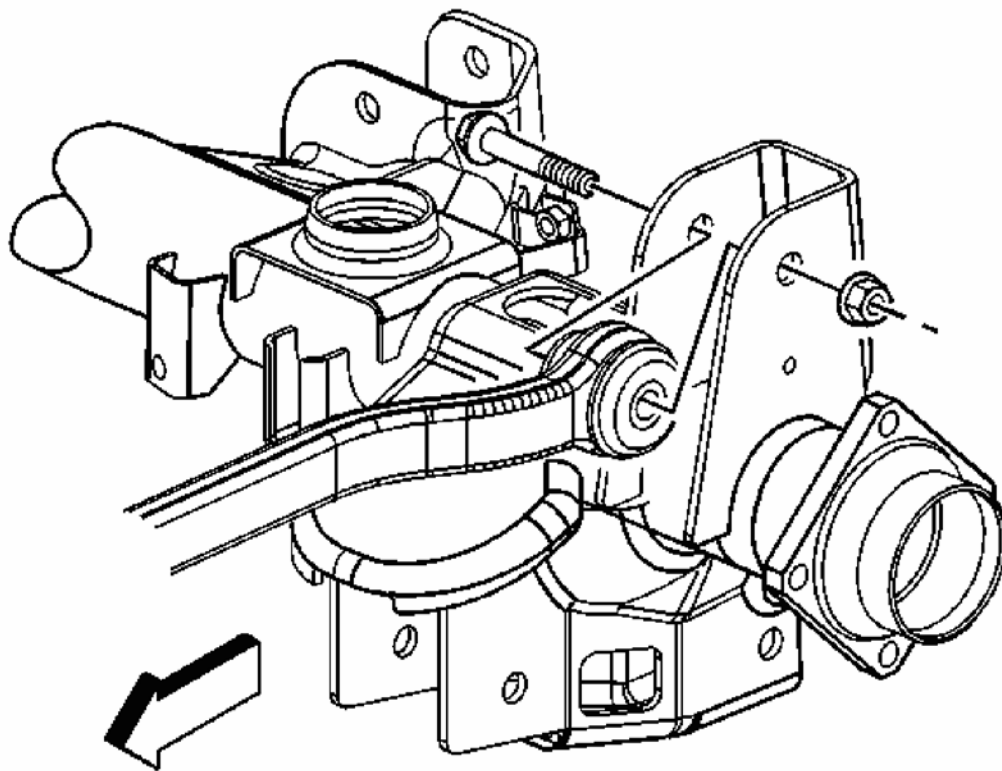


**Fig. 2: Upper Control Arm-To-Axle Bracket Retaining Nut And Bolt**  
**Courtesy of GENERAL MOTORS CORP.**

4. Remove the upper control arm retaining nut and bolt from the axle bracket.
5. Remove the upper control arm.

**Installation Procedure**

1. Install the upper control arm.

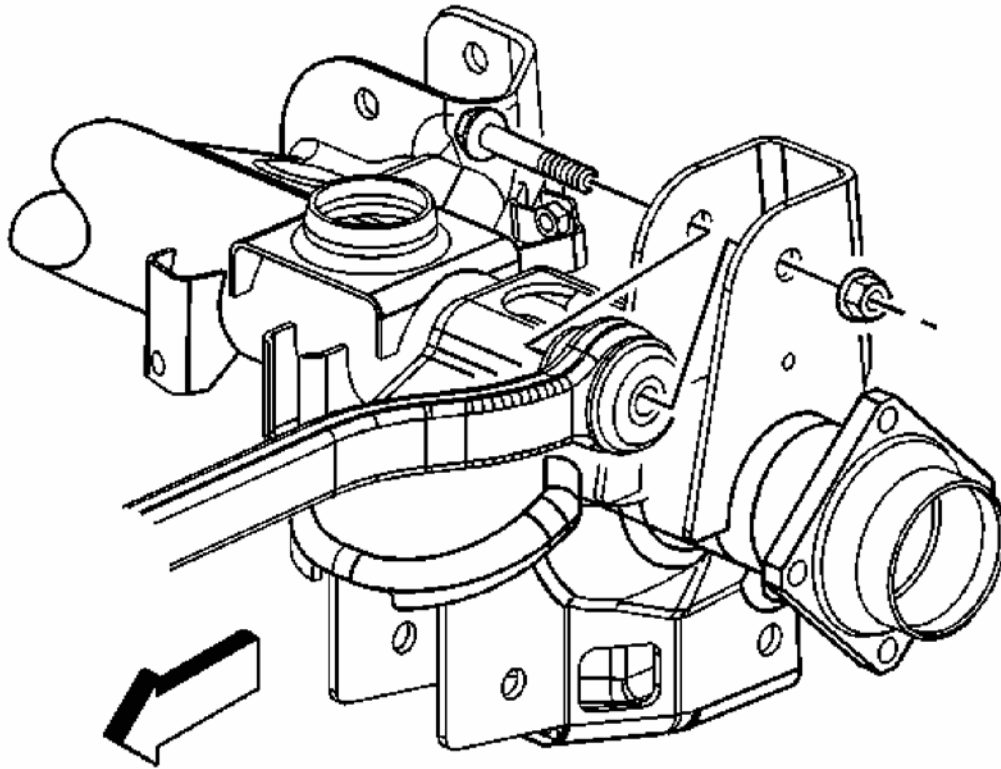


**Fig. 3: Upper Control Arm-To-Axle Bracket Retaining Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

2. Install the upper control arm retaining bolt and nut to the axle bracket.

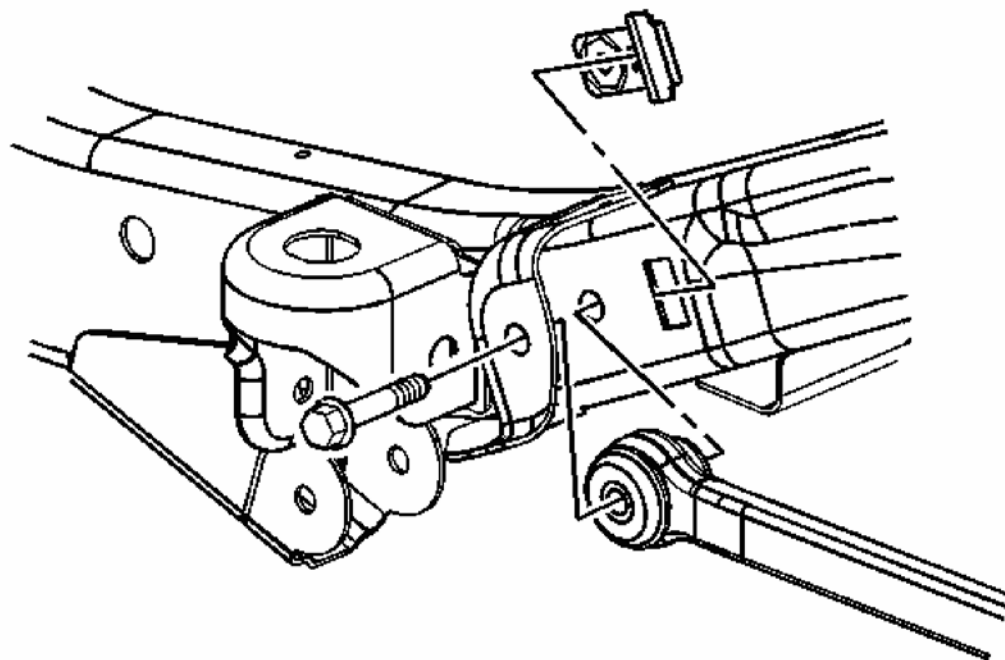


**Fig. 4: Upper Control Arm-To-Frame Bracket Retaining Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

3. Install the upper control arm retaining bolt to the frame bracket.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

**IMPORTANT:** Do not tighten the nuts unless the suspension is at the curb height position.

4. Install the upper control arm retaining nut.

**Tighten:** Tighten the upper control arm retaining bolts to 105 N.m (77 lb ft).

5. Connect the (ESC) sensor, if equipped. Refer to Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series) or Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series) or Rear Position Sensor Replacement - Electronic Suspension - Right in Electronic Suspension Control (ESC).
6. Lower the vehicle.

### Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

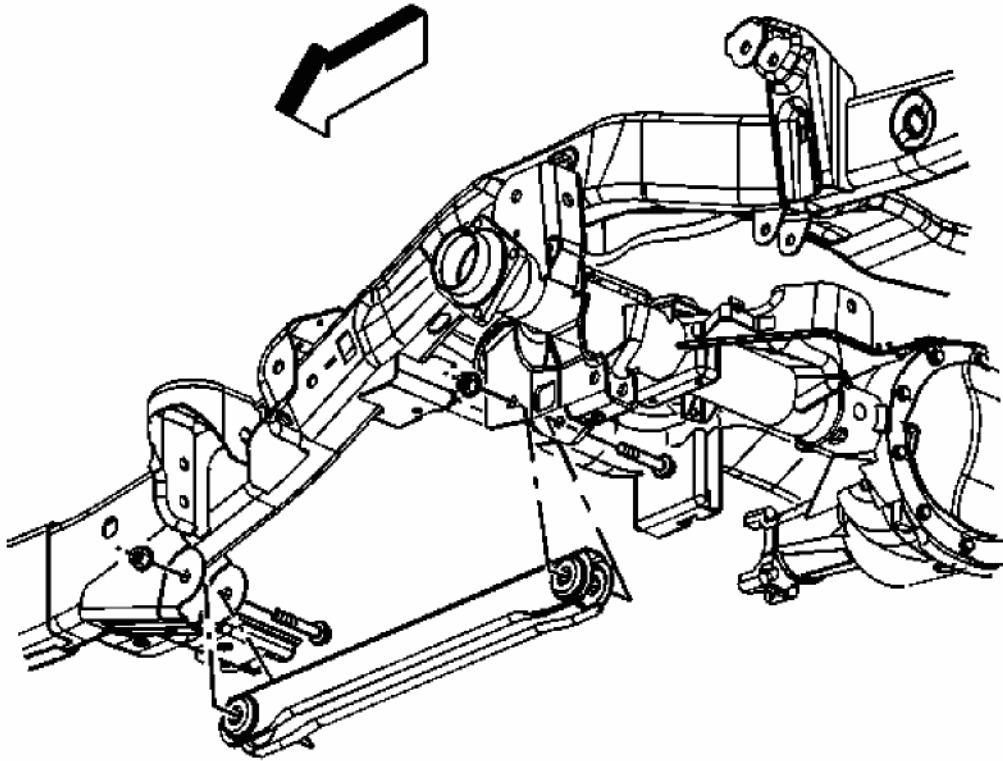


**Fig. 5: Lower Control Arm, Retaining Nuts & Bolts**  
Courtesy of GENERAL MOTORS CORP.

2. Remove the lower control arm retaining nuts.
3. Remove the lower control arm retaining bolt.
4. Remove the lower control arm.

### Installation Procedure

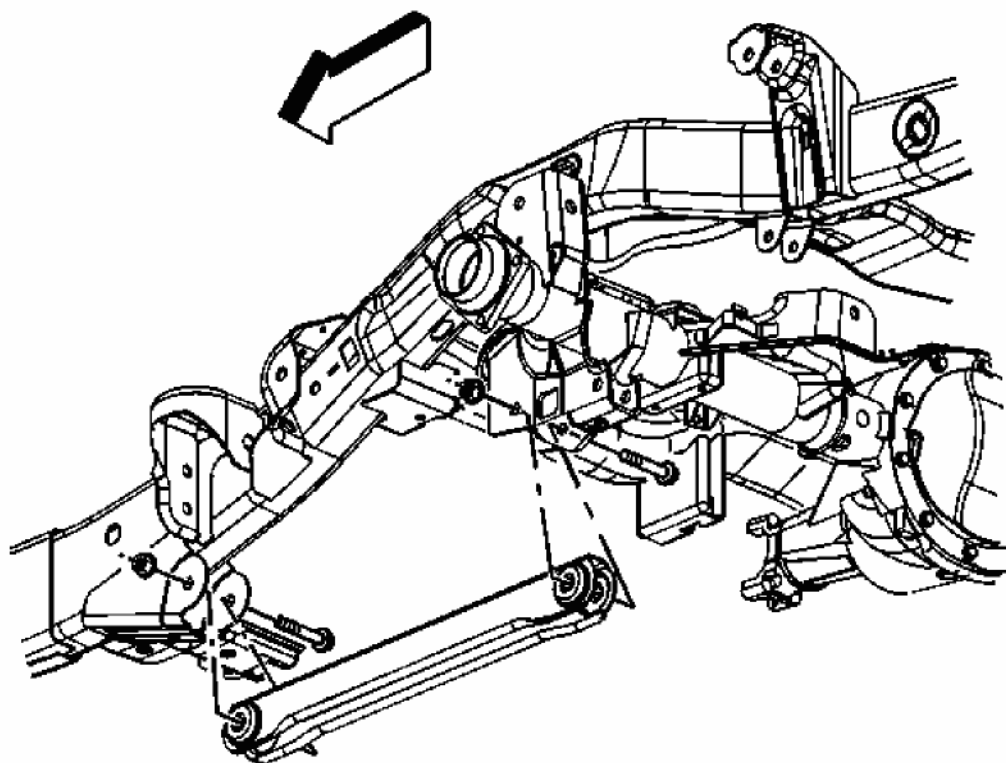


**Fig. 6: Lower Control Arm, Retaining Nuts & Bolts**  
Courtesy of GENERAL MOTORS CORP.

1. Install the lower control arm.
2. Install the lower control arm retaining bolts.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

**IMPORTANT:** Do not tighten the bolts unless the suspension is at the ride height.

3. Install the lower control arm retaining nut.

**Tighten:** Tighten the lower control arm retaining bolts to 120 N.m (89 lb ft).

4. Remove the rear axle support.
5. Lower the vehicle.

**Removal Procedure**

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

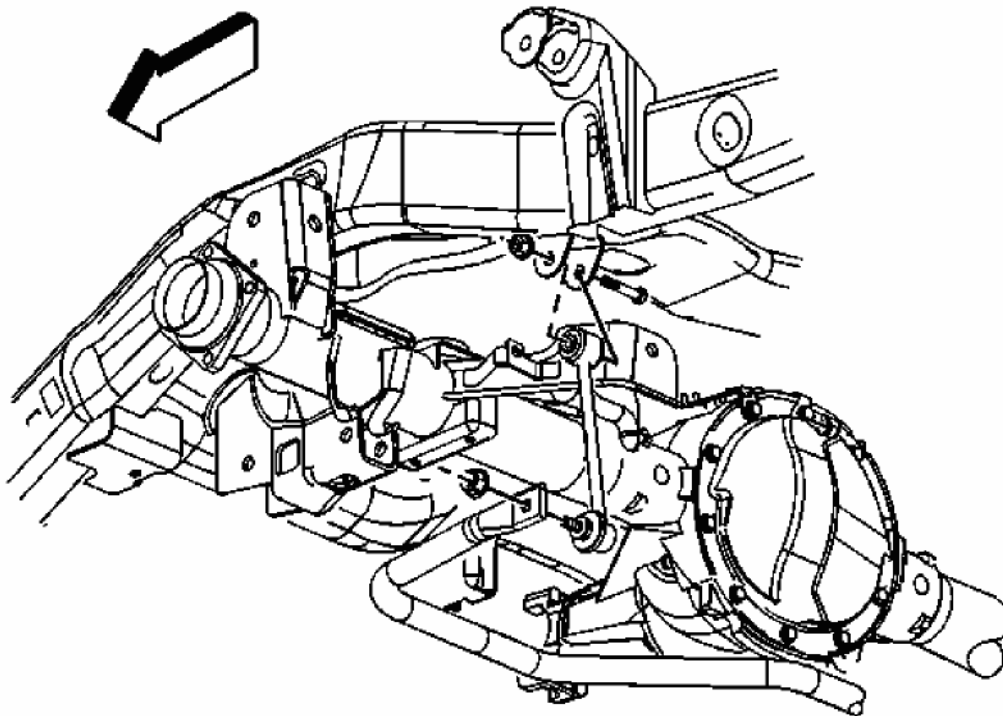


**Fig. 7: Stabilizer Shaft Link**  
Courtesy of GENERAL MOTORS CORP.

2. Remove the stabilizer shaft link nut from the ball stud.

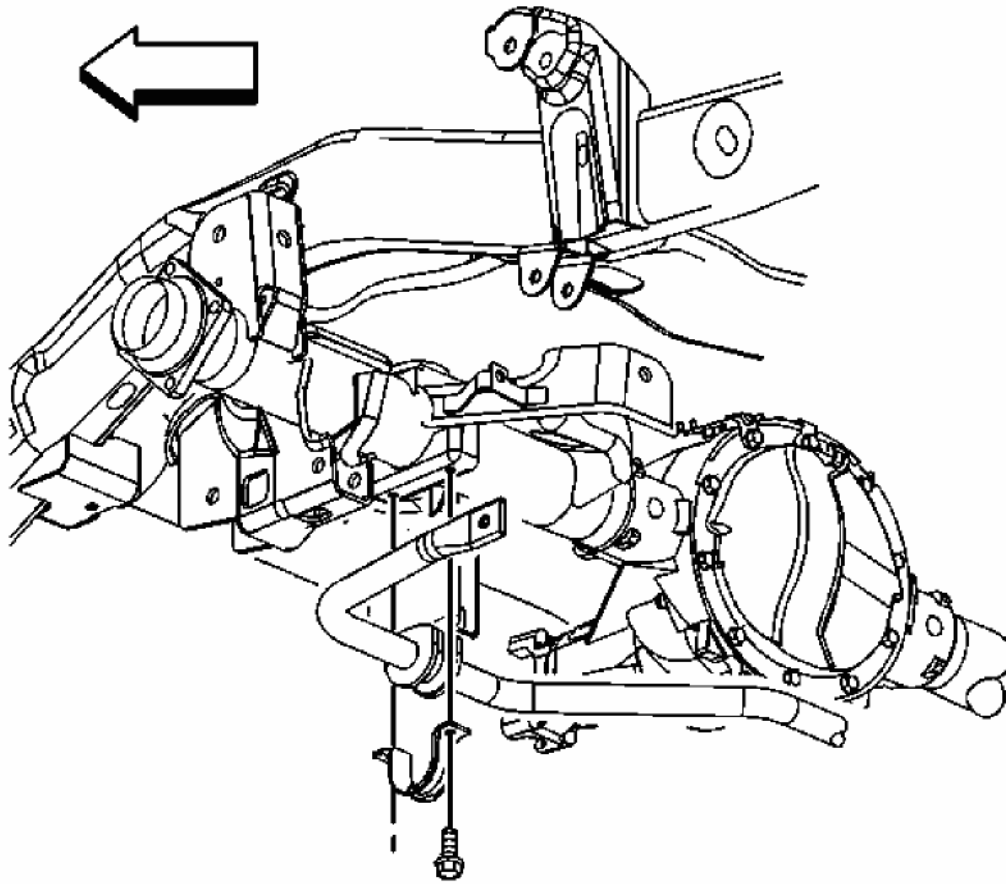


**Fig. 8: Stabilizer Shaft Insulator & Brackets**  
**Courtesy of GENERAL MOTORS CORP.**

3. Remove the stabilizer shaft insulator bracket mounting bolts.
4. Remove the stabilizer shaft.
5. Remove the stabilizer shaft insulators brackets.
6. Remove the stabilizer shaft insulators.

**Installation Procedure**

1. Install the stabilizer shaft insulators.

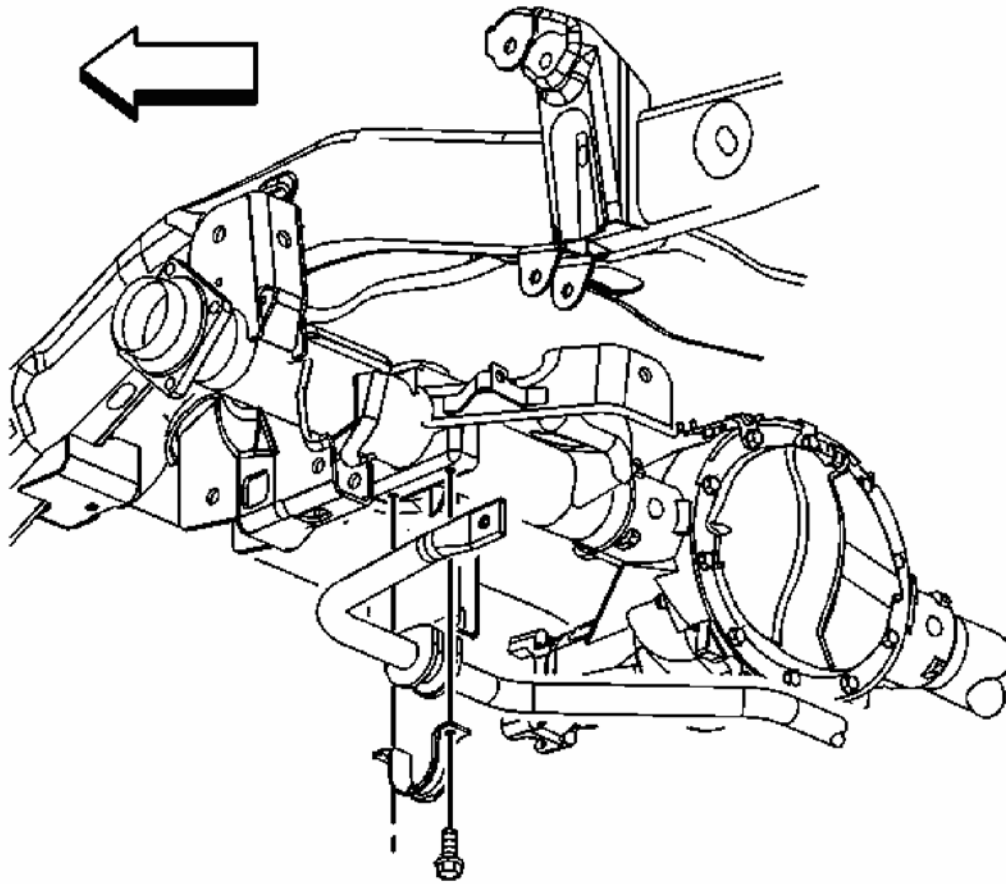


**Fig. 9: Stabilizer Shaft Insulator & Brackets**  
**Courtesy of GENERAL MOTORS CORP.**

2. Install the stabilizer shaft.
3. Install the stabilizer shaft insulator brackets to the rear axle.
4. Install the stabilizer shaft bracket mounting bolts.

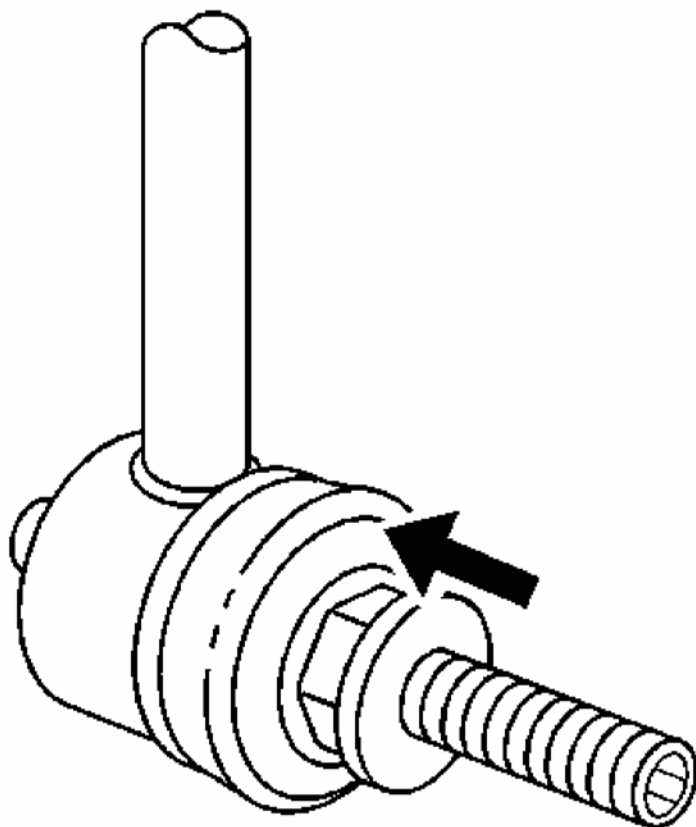


**Fig. 10: Identifying Installation Position Of Lower Link Inner Jam Nut To Ball Stud**

Courtesy of GENERAL MOTORS CORP.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

**IMPORTANT:** When tightening the lower link nut verify that the inner jam nut bottoms out on the ball stud.

5. Install the stabilizer shaft link nut to the ball stud.

**Tighten:**

1. Tighten the ball stud to stabilizer shaft nut to 65 N.m (48 lb ft).
2. Tighten the insulator bracket bolts to 33 N.m (24 lb ft).

6. Lower the vehicle.

## STABILIZER SHAFT INSULATOR REPLACEMENT

### Removal Procedure

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in General Information.

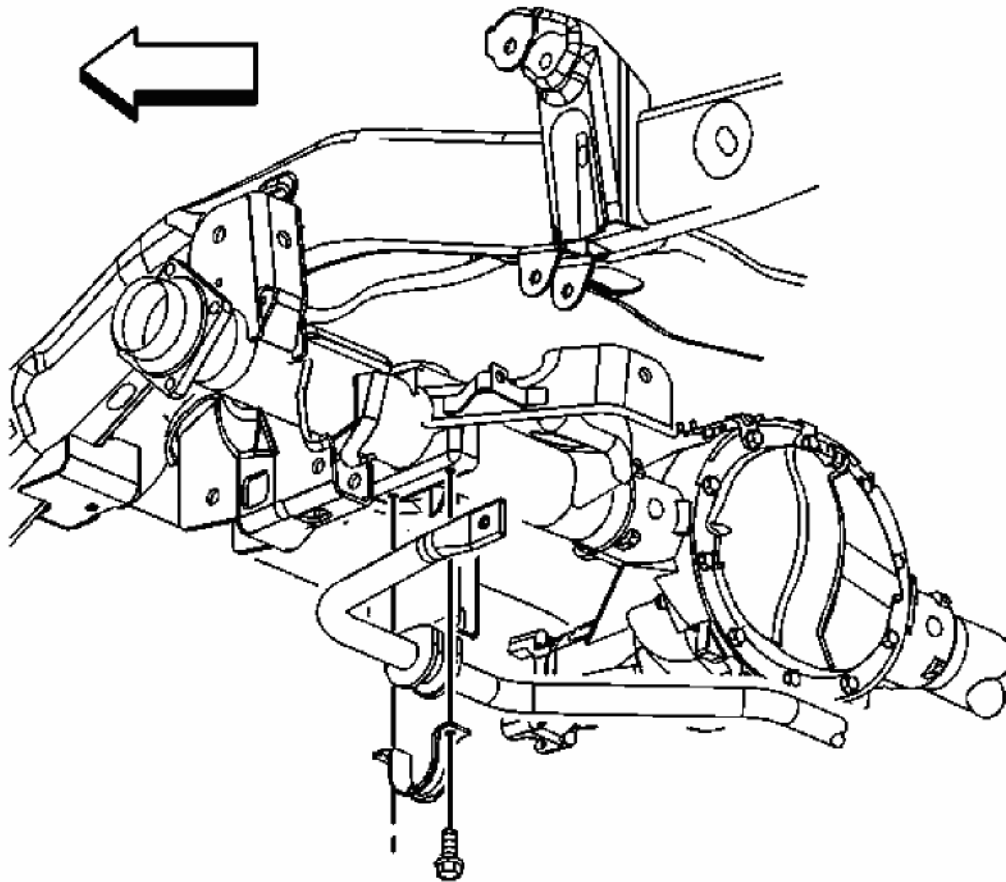


**Fig. 11: Stabilizer Shaft Insulator & Brackets**  
**Courtesy of GENERAL MOTORS CORP.**

2. Remove the stabilizer shaft insulator bracket mounting bolts, 15/25 series shown, 35 series similar.
3. Remove the stabilizer shaft insulators brackets.
4. Lower the stabilizer shaft and remove the stabilizer shaft insulators.
5. Inspect all of the parts for wear or damage.

### Installation Procedure

**IMPORTANT:** Place the stabilizer shaft insulators on the stabilizer bar with the slits facing toward the front of the vehicle.

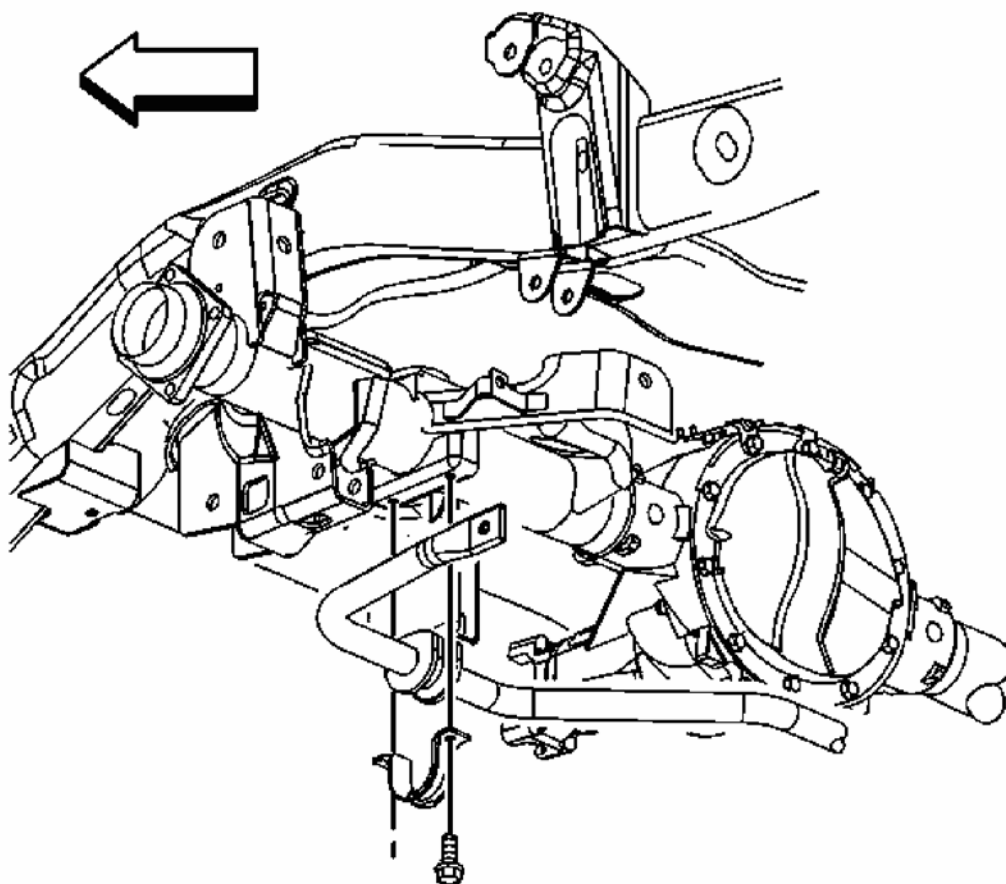


**Fig. 12: Stabilizer Shaft Insulator & Brackets**  
Courtesy of GENERAL MOTORS CORP.

1. Install the stabilizer shaft insulators to the stabilizer bar.
2. Install the stabilizer shaft insulator brackets to the rear axle, 15/25 series shown, 35 series similar.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

3. Install the stabilizer shaft bracket mounting bolts.

**Tighten:** Tighten the insulator bracket bolts to 33 N.m (24 lb ft).

4. Lower the vehicle.

### **STABILIZER SHAFT LINK REPLACEMENT (15/25 SERIES)**

#### **Removal Procedure**

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

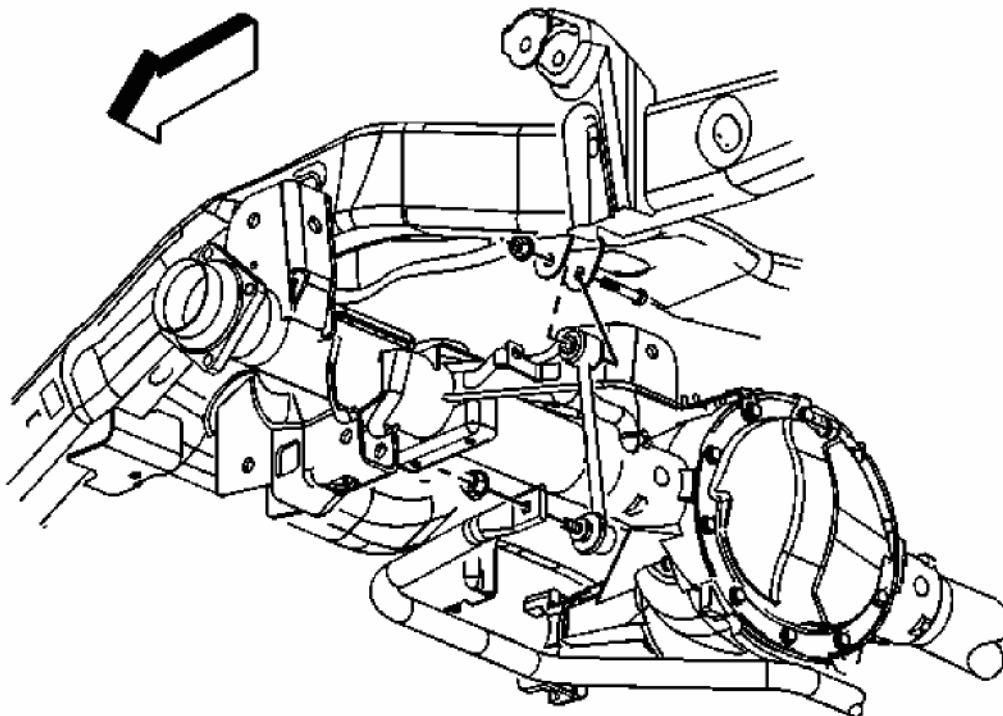


**Fig. 13: Stabilizer Shaft Link**  
**Courtesy of GENERAL MOTORS CORP.**

2. Remove the stabilizer shaft link nut and bolt from the frame bracket.
3. Remove the stabilizer shaft link nut from the ball stud.
4. Remove the stabilizer shaft link.

#### **Installation Procedure**

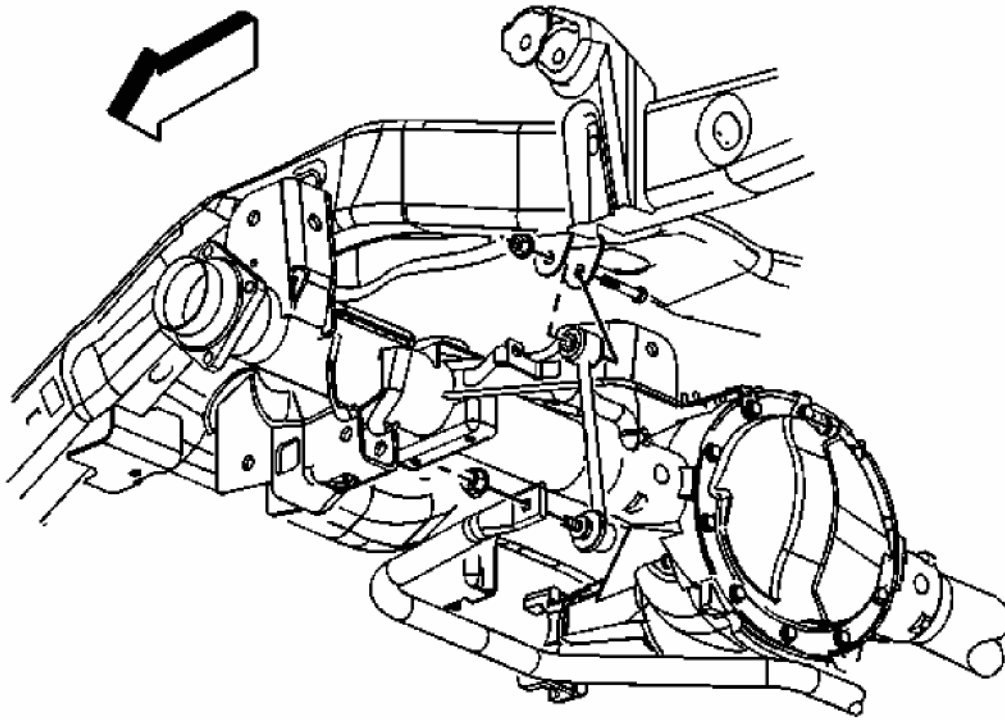


**Fig. 14: Stabilizer Shaft Link**  
**Courtesy of GENERAL MOTORS CORP.**

1. Install the stabilizer shaft link.

**IMPORTANT:** When tightening the lower link nut verify that the inner jam nut bottoms out on the ball stud.

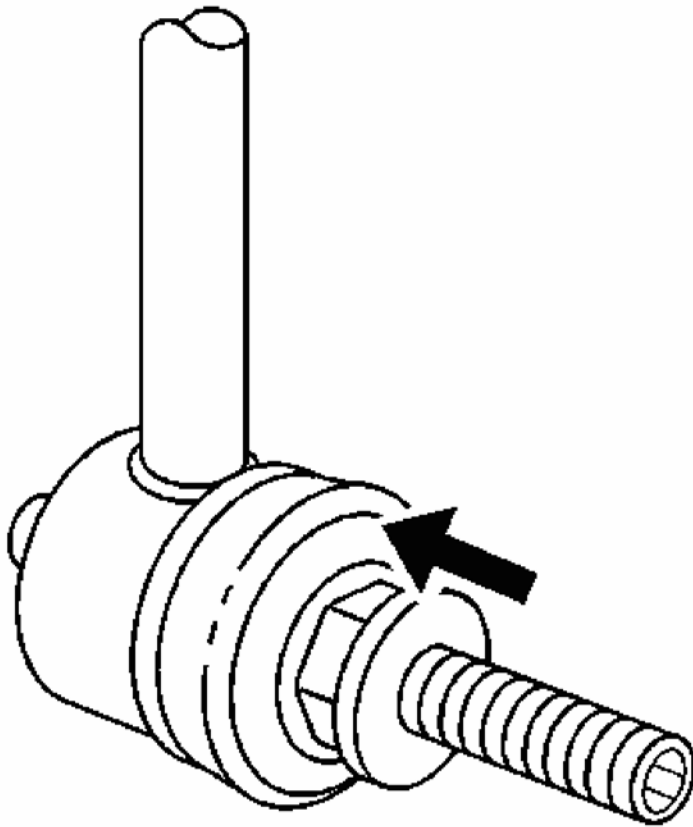


**Fig. 15: Identifying Installation Position Of Lower Link Inner Jam Nut To Ball Stud**

**Courtesy of GENERAL MOTORS CORP.**

2. Install the stabilizer shaft link nut to the ball stud.

**NOTE:      Refer to Fastener Notice in Cautions and Notices.**

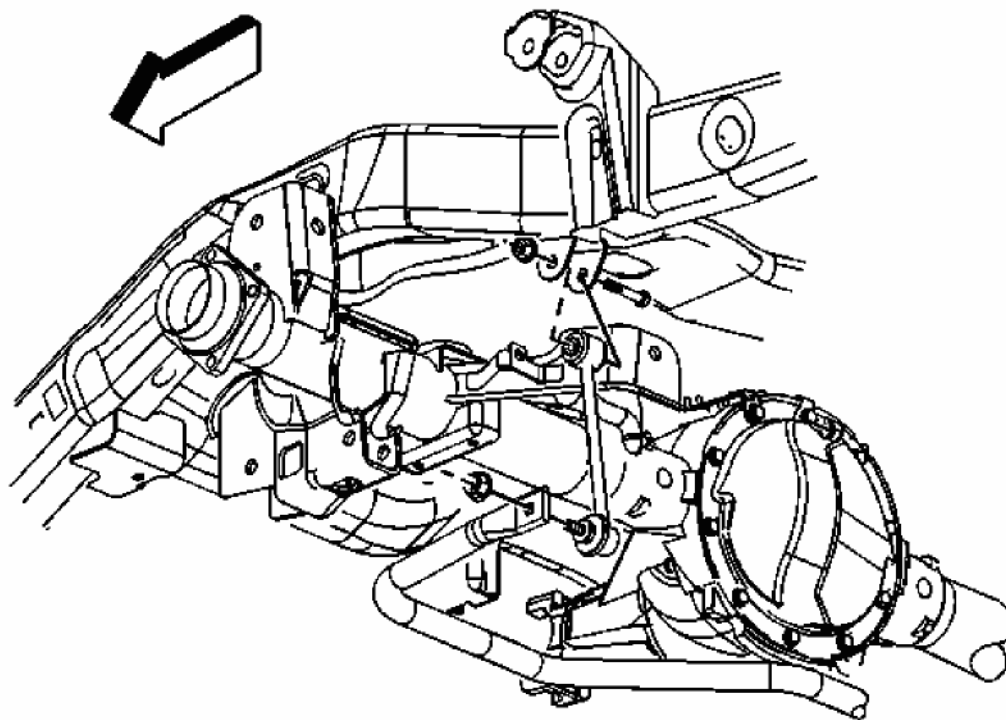


**Fig. 16: Stabilizer Shaft Link**  
Courtesy of GENERAL MOTORS CORP.

3. Install the stabilizer shaft link nut and bolt to the frame bracket.

**Tighten:**

1. Tighten the link to frame bracket nut to 65 N.m (48 lb ft).
  2. Tighten the ball stud to stabilizer shaft nut to 65 N.m (48 lb ft).
4. Lower the vehicle.

**SHOCK ABSORBER REPLACEMENT (15 SERIES)**

**Removal Procedure**

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

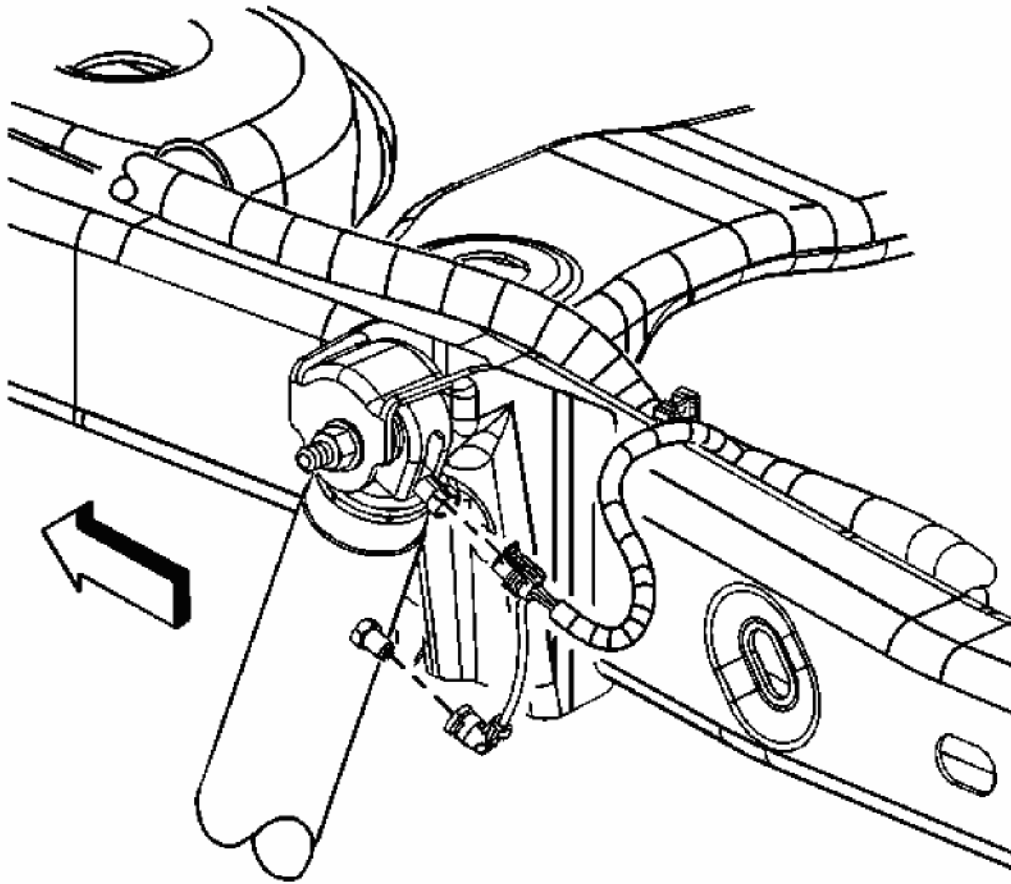


**Fig. 17: ESC Electrical Connector & Air Line**  
Courtesy of GENERAL MOTORS CORP.

2. Disconnect the electrical connector and air line if equipped with electronic suspension control (ESC).
3. Support the rear axle.
4. Disconnect the ESC sensor, if equipped. Refer to **Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Right** in Electronic Suspension Control (ESC).

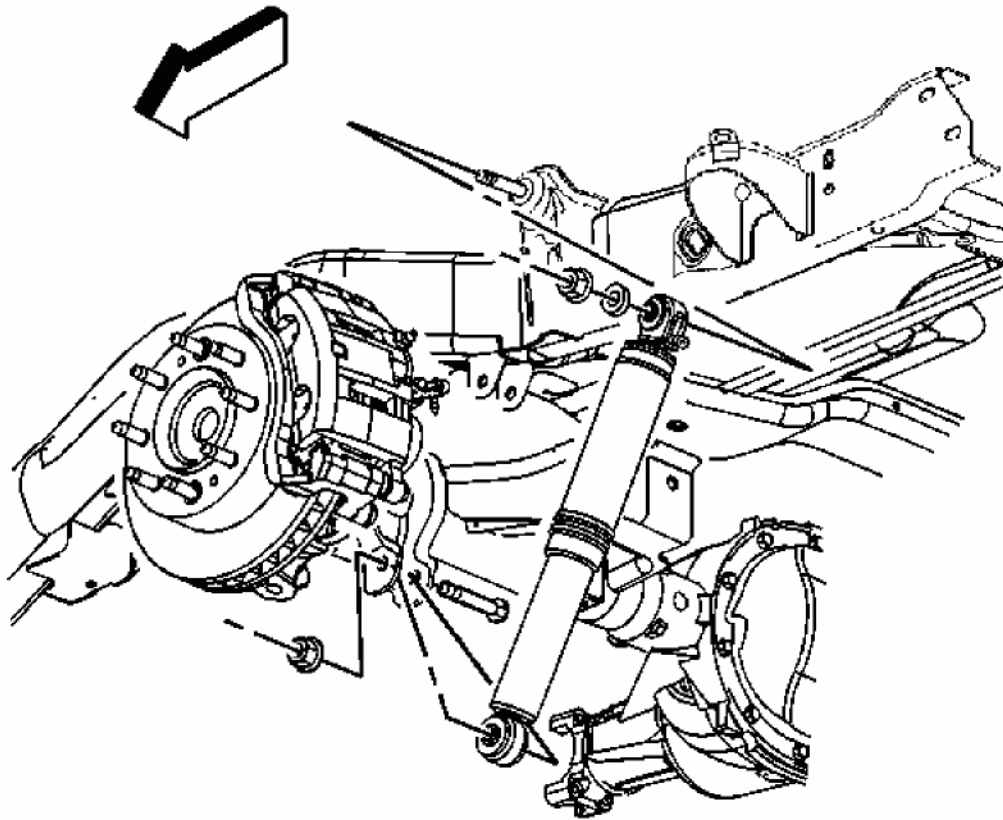


**Fig. 18: Shock Absorber Upper & Lower Nuts & Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

5. Remove the upper shock absorber nut and the bolt.
6. Remove the lower shock absorber nut and the bolt.
7. Remove the shock absorber.

**Installation Procedure**

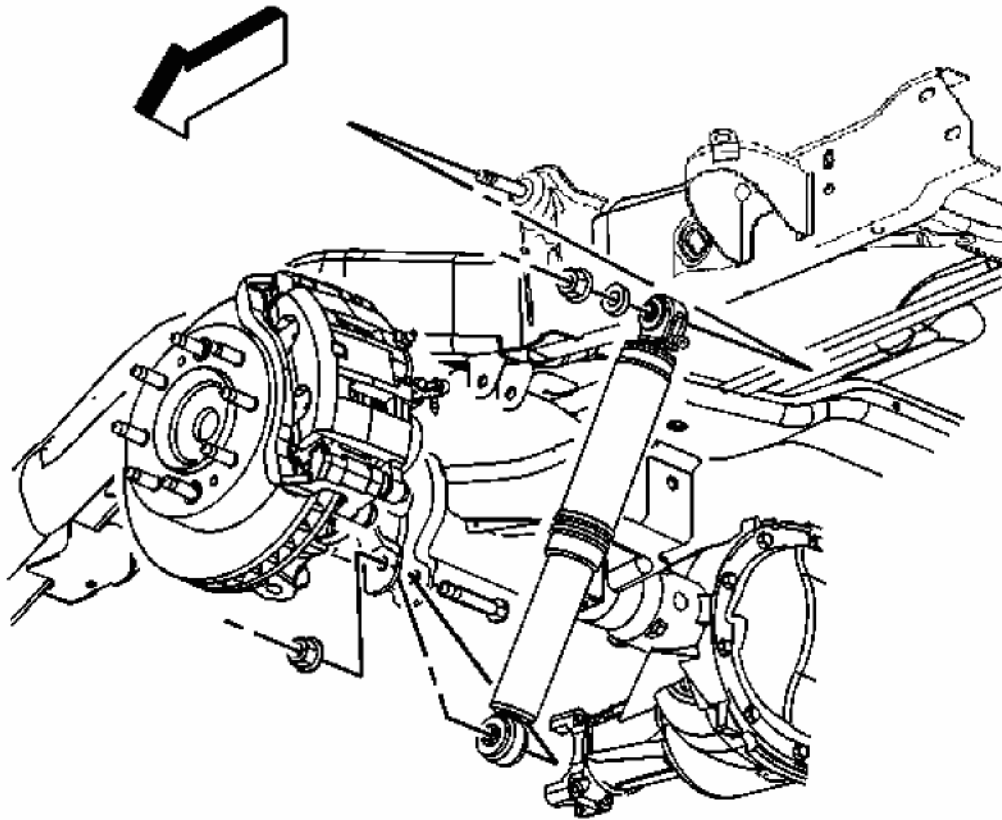


**Fig. 19: Shock Absorber Upper & Lower Nuts & Bolts**  
Courtesy of GENERAL MOTORS CORP.

1. Install the shock absorber.
2. Install the upper shock absorber nut and bolt.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

3. Install the lower shock absorber nut and bolt.

**Tighten:** Tighten the upper and lower shock absorber nuts to 95 N.m (70 lb ft).

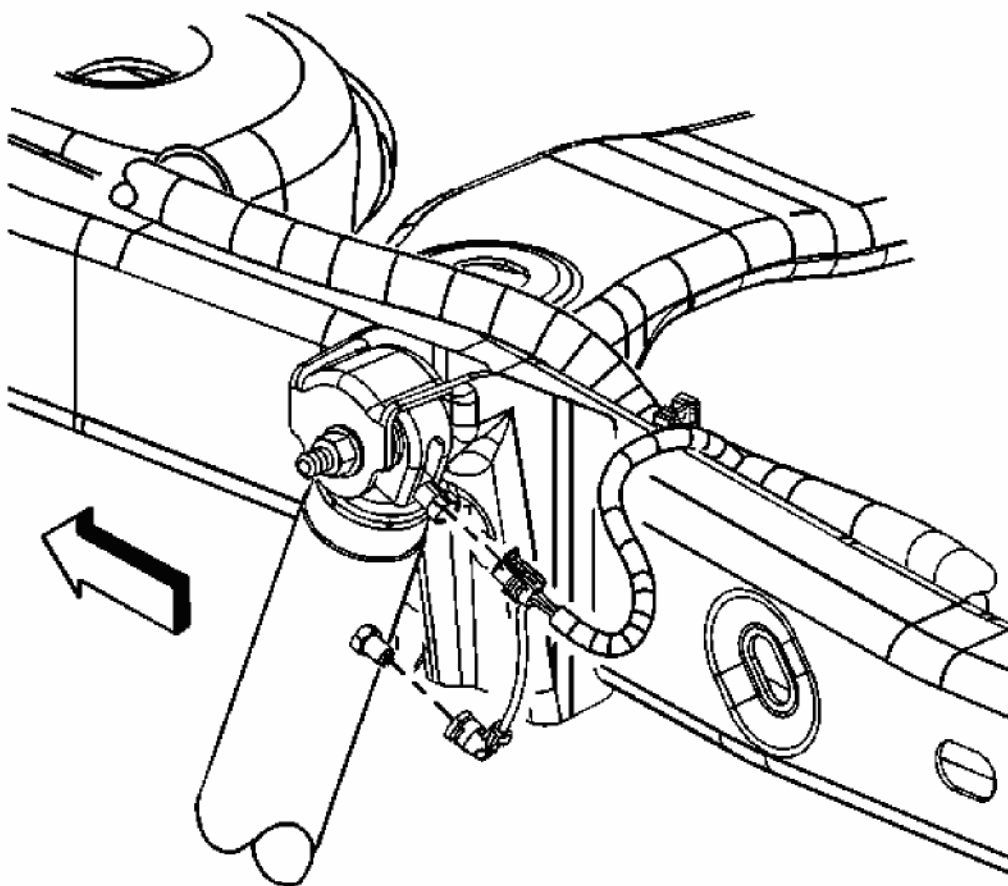


**Fig. 20: ESC Electrical Connector & Air Line**  
Courtesy of GENERAL MOTORS CORP.

4. Connect the electrical connector and air line if equipped with RTD.
5. Connect the ESC sensor, if equipped. Refer to **Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Right** in Electronic Suspension Control (ESC).
6. Remove the support from the rear axle.
7. Remove the safety stands.
8. Lower the vehicle.

## **SHOCK ABSORBER REPLACEMENT (25 SERIES)**

### **Removal Procedure**

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Support the rear axle.

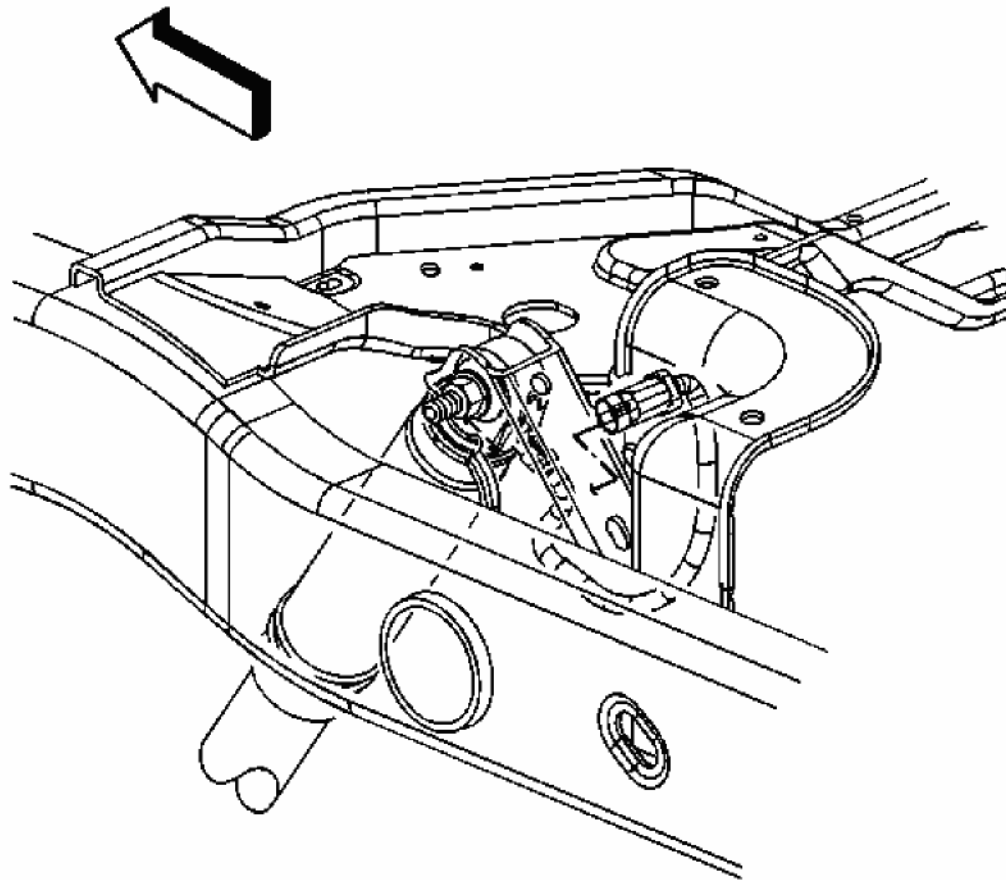


**Fig. 21: ESC Electrical Connector At Left Side Pigtail Connector**  
Courtesy of GENERAL MOTORS CORP.

3. Disconnect the electronic suspension control (ESC) electrical connector at the pigtail connector left side only, if equipped.
4. Disconnect the ESC electrical connector at the top of the right side shock, if equipped.
5. Disconnect the ESC sensor, if equipped. Refer to **Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Right** in Electronic Suspension Control (ESC).

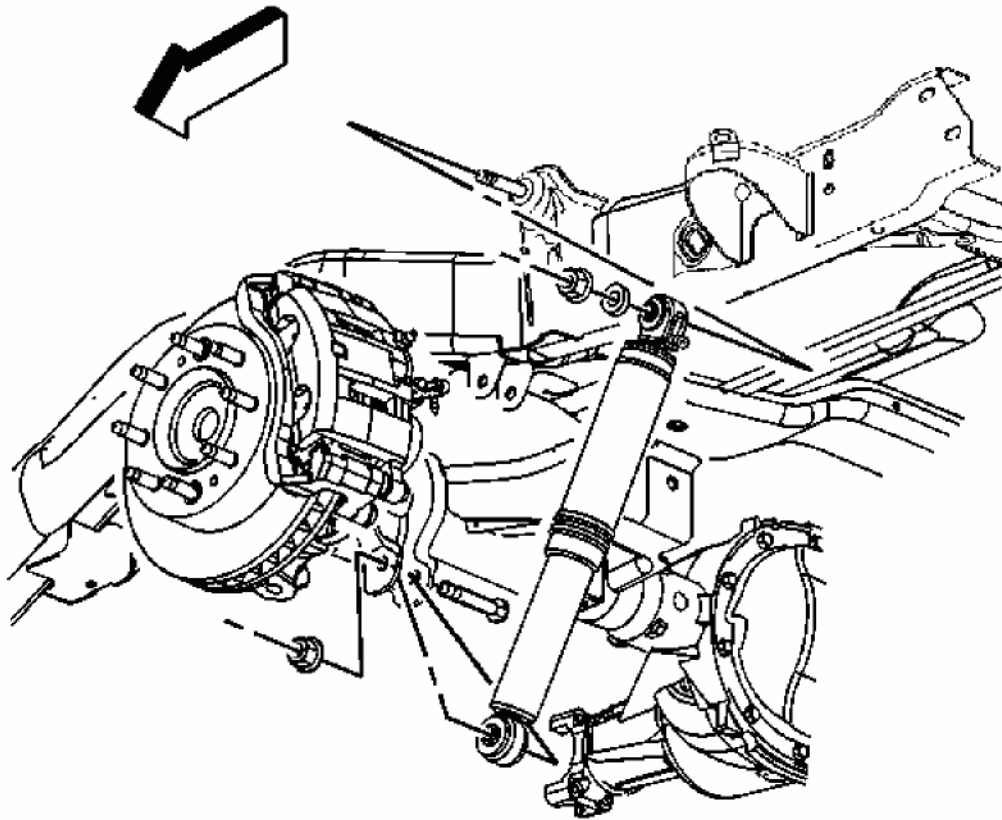


**Fig. 22: Shock Absorber Upper & Lower Nuts & Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

6. Remove the upper shock absorber nut and the bolt.
7. Remove the lower shock absorber nut and the bolt.
8. Remove the shock absorber.

**Installation Procedure**

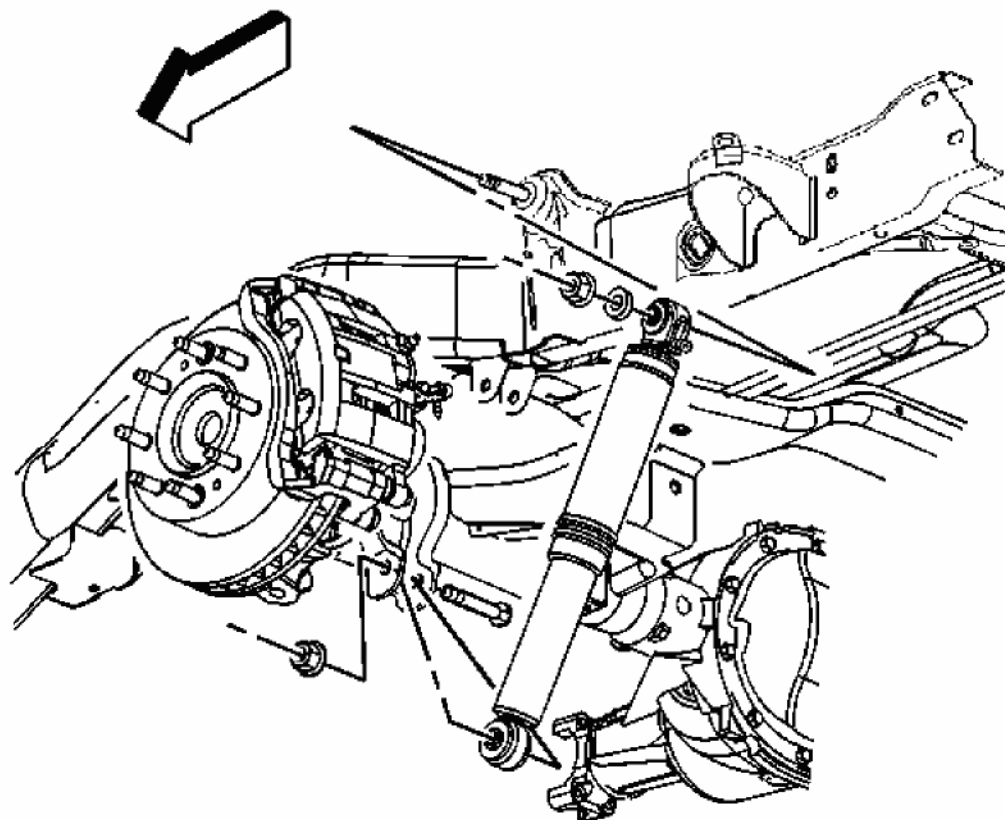


**Fig. 23: Shock Absorber Upper & Lower Nuts & Bolts**  
Courtesy of GENERAL MOTORS CORP.

1. Install the shock absorber.
2. Install the upper shock absorber nut and bolt.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

3. Install the lower shock absorber nut and bolt.

**Tighten:** Tighten the upper and lower shock absorber nuts to 95 N.m (70 lb ft).

4. Remove the rear axle support.
5. Connect the ESC sensor, if equipped. Refer to Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series) or Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series) or Rear Position Sensor Replacement - Electronic Suspension - Right in Electronic Suspension Control (ESC).

6. Connect the ESC electrical connector at the top of the right side shock, if equipped.

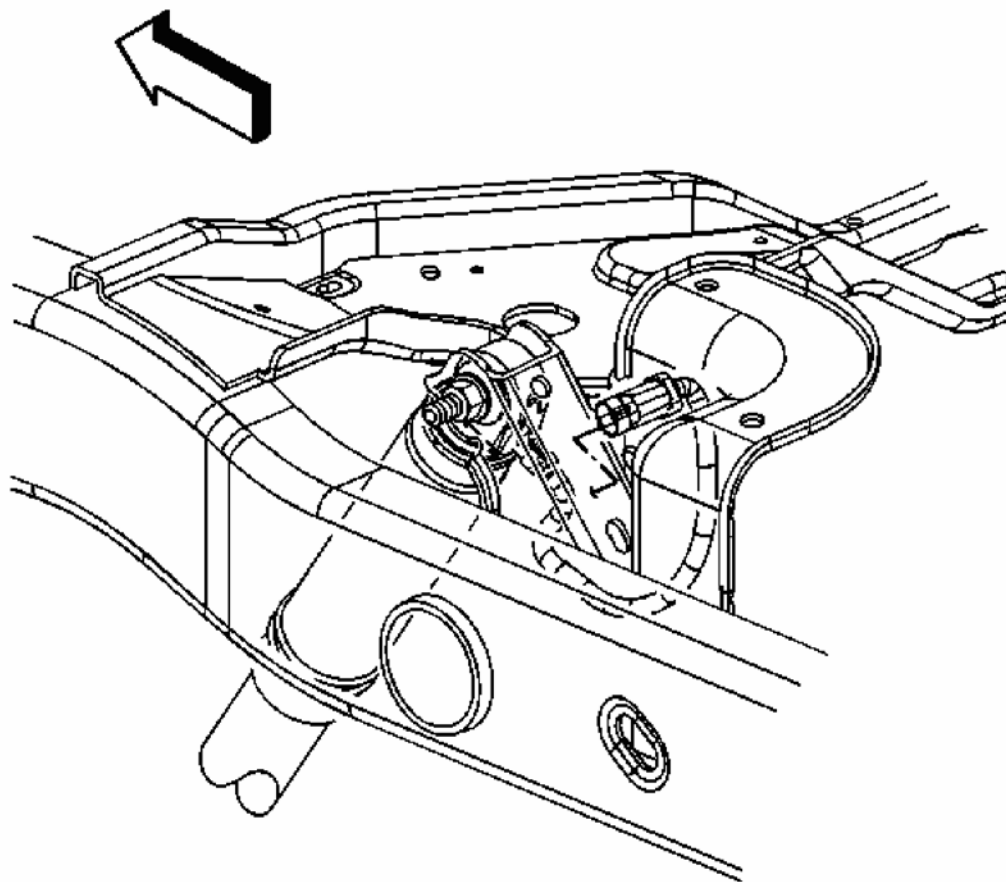


**Fig. 24: ESC Electrical Connector At Left Side Pigtail Connector**  
Courtesy of GENERAL MOTORS CORP.

7. Connect the ESC electrical connector at the pigtail connector left side only, if equipped.
8. Remove the safety stands.
9. Lower the vehicle.

#### **SHOCK ABSORBER DISPOSAL**

**CAUTION:** Gas charged shock absorbers contain high pressure gas. Do not remove the snap ring from inside the top of the tube. If the snap ring is removed, the contents of the shock absorber will come out with extreme force which may result in personal injury.

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**CAUTION:** To prevent personal injury, wear safety glasses when centerpunching and drilling the shock absorber. Use care not to puncture the shock absorber tube with the centerpunch.

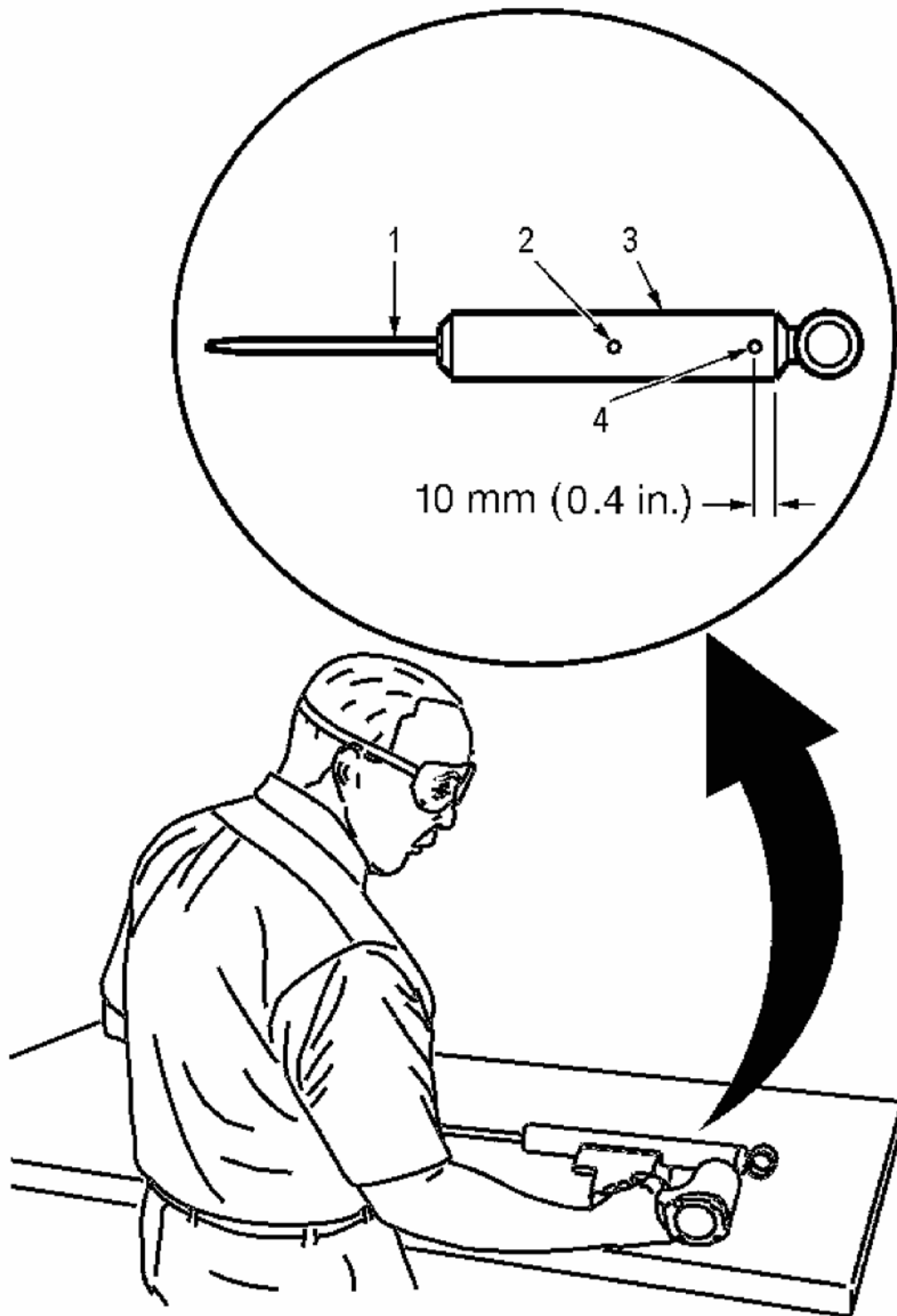


**Fig. 25: Drilling Hole In Shock Absorber At Centerpunched Locations**  
Courtesy of GENERAL MOTORS CORP.

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1. Make an indentation 10 mm (0.4 in) from the bottom (4) of the tube (3) using a centerpunch.
2. Clamp the shock absorber in a vise horizontally with the shock absorber rod (1) completely extended.
3. Drill a hole in the shock absorber at the centerpunch (4) using a 5 mm (3/16 in) drill bit. Gas or a gas/oil mixture will exhaust when the drill bit penetrates the shock absorber. Use shop towels in order to contain the escaping oil.
4. Make an indentation in the middle (2) of the tube (3) with a centerpunch.
5. Drill a second hole in the shock absorber at the centerpunch (2) using a 5 mm (3/16 in) drill bit. Oil will exhaust when the drill bit penetrates the shock absorber. Use shop towels in order to contain the escaping oil.
6. Remove the shock absorber from the vise. Hold the shock absorber over a drain pan horizontally with the holes down. Move the rod (1) in and out of the tube (3) to completely drain the oil from the shock absorber.

## COIL SPRING REPLACEMENT

### Removal Procedure

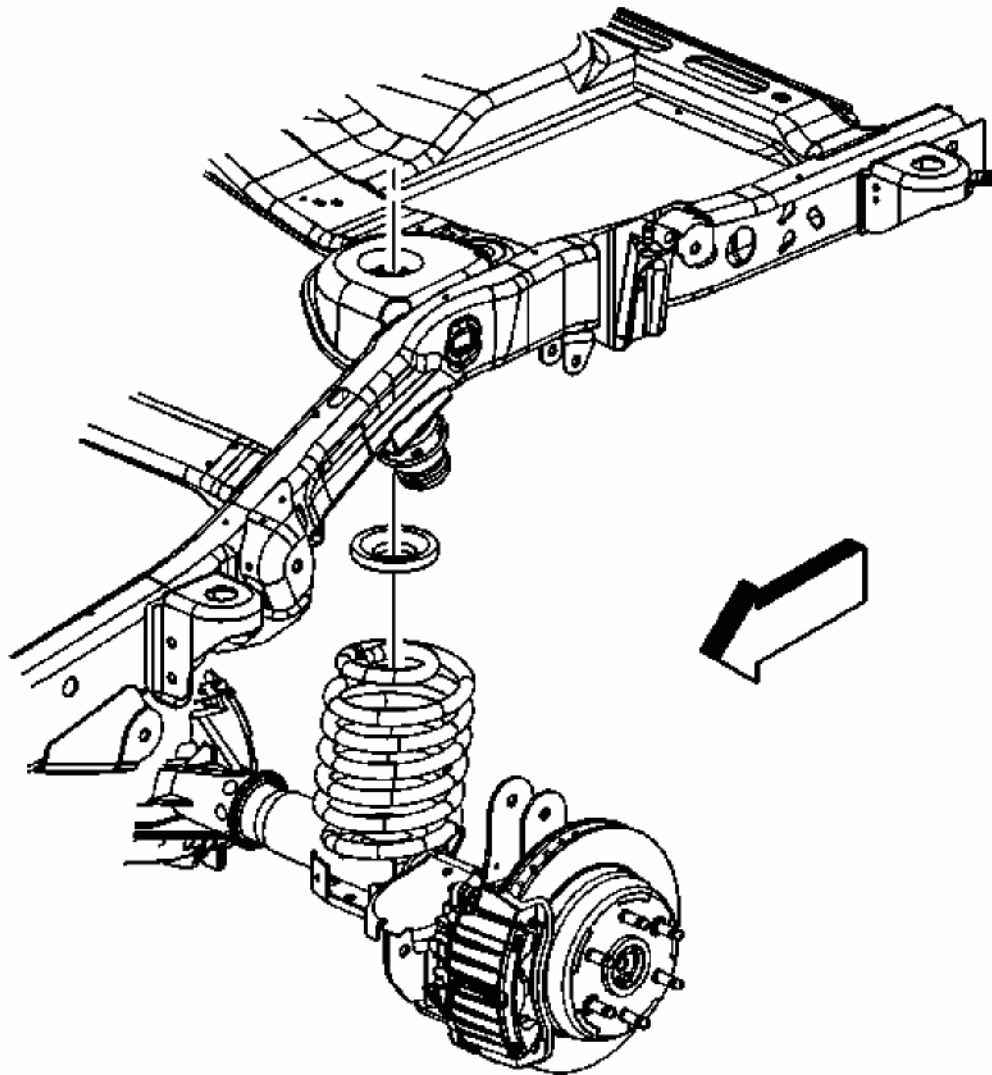


**Fig. 26: Coil Spring And The Upper Insulator**  
Courtesy of GENERAL MOTORS CORP.

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Support the rear axle.
3. Disconnect the electronic suspension control (ESC) sensor, if equipped. Refer to **Rear Position Sensor Link Assembly Replacement - Electronic Suspension** in Electronic Suspension Control (ESC).

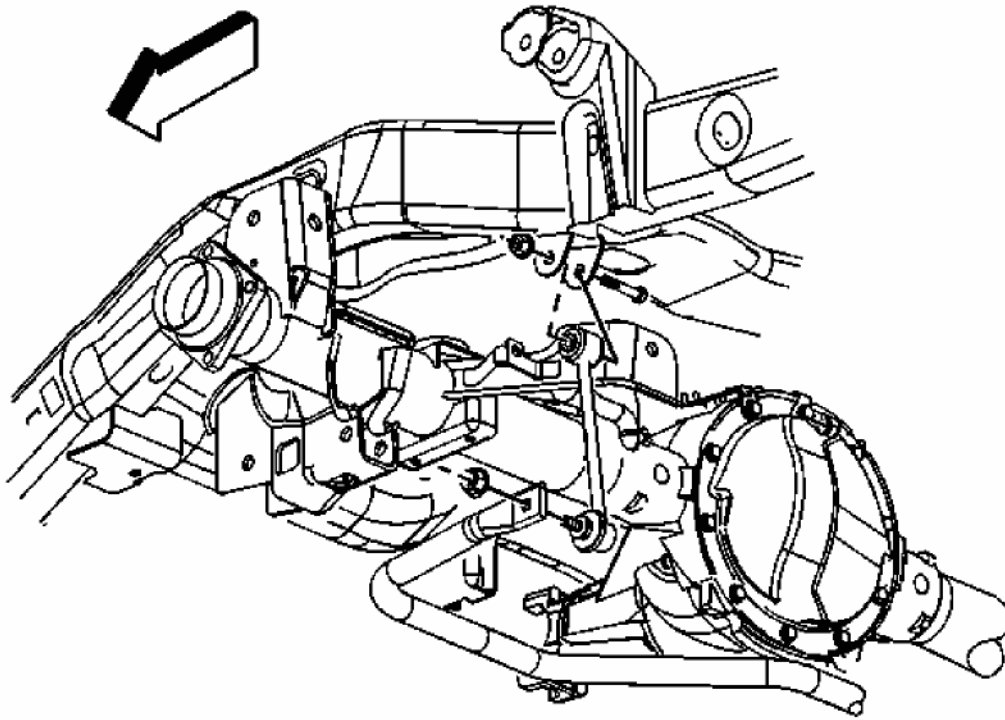


**Fig. 27: Stabilizer Shaft Link**  
**Courtesy of GENERAL MOTORS CORP.**

4. Remove the stabilizer shaft link retaining nut from the frame.

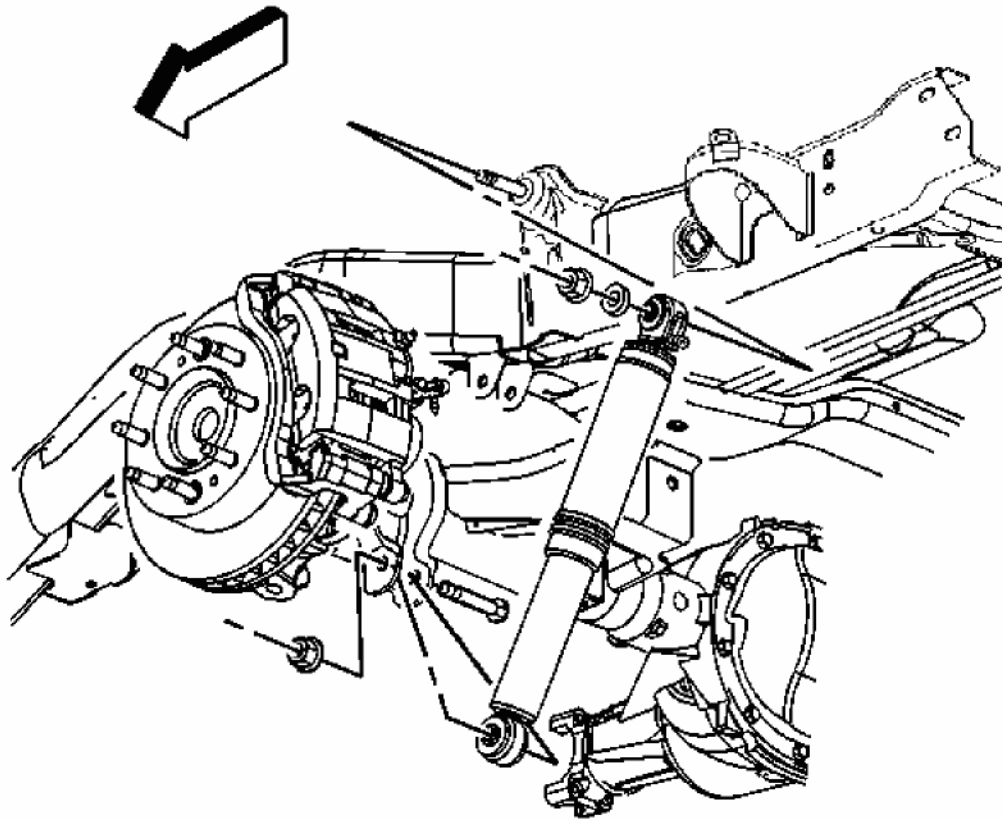


**Fig. 28: Shock Absorber Upper & Lower Nuts & Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

5. Remove the lower shock absorber nut and bolt from the rear axle.
6. Lower the rear axle until the springs are fully unloaded.
7. Remove the coil spring and the upper insulator.

**Installation Procedure**

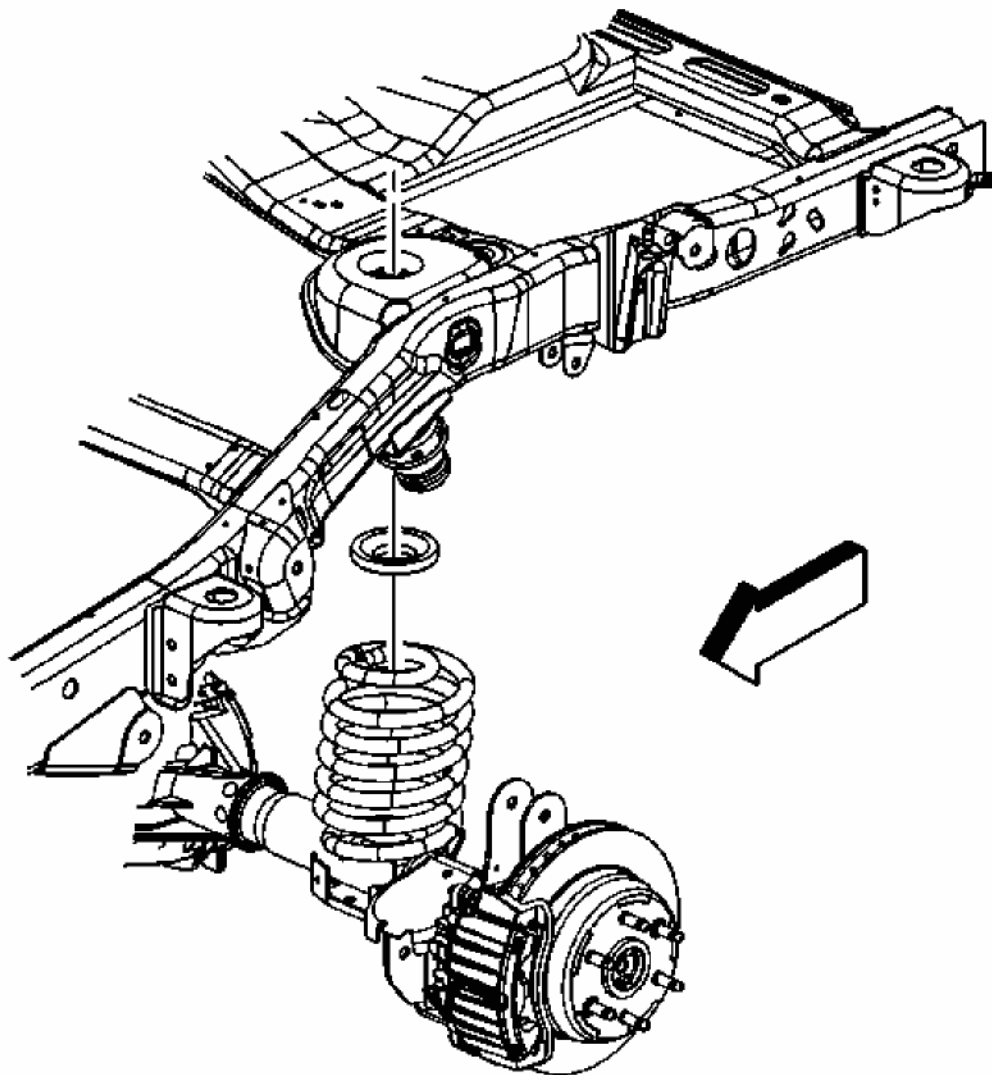


**Fig. 29: Coil Spring And The Upper Insulator**  
**Courtesy of GENERAL MOTORS CORP.**

1. Install the coil spring and the upper insulator.
2. Raise the rear axle.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

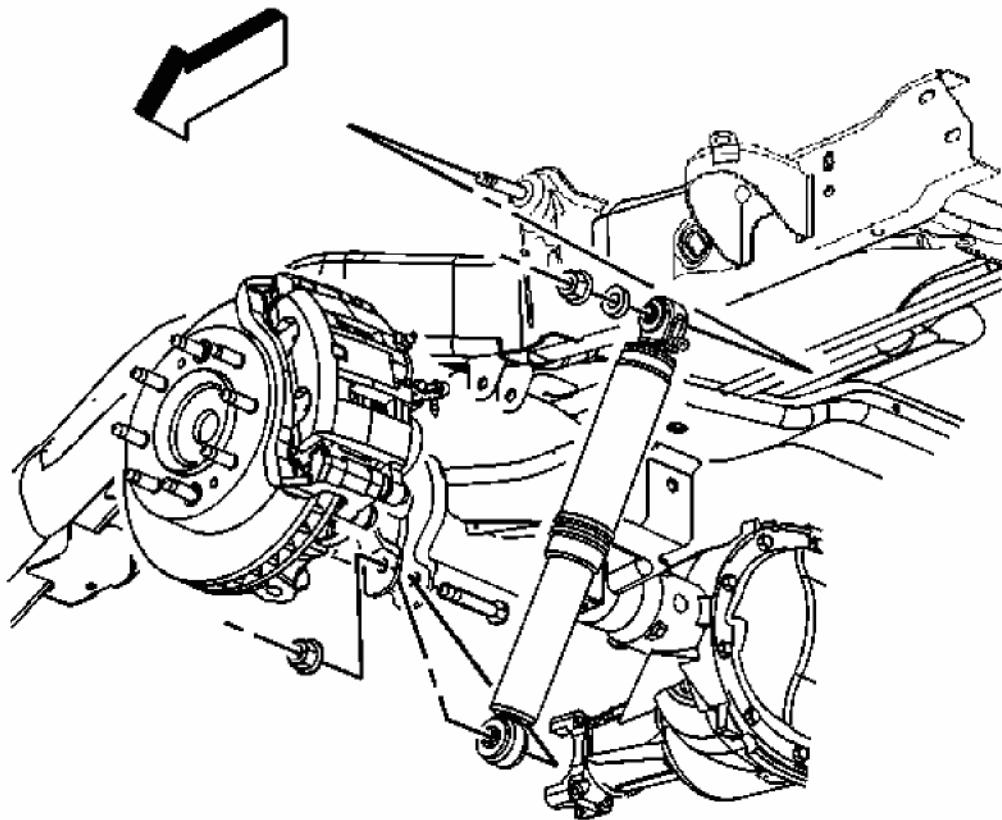


**Fig. 30: Shock Absorber Upper & Lower Nuts & Bolts**  
Courtesy of GENERAL MOTORS CORP.

3. Install the lower shock absorber retaining nut and bolt to the rear axle.

**Tighten:** Tighten the lower shock absorber retaining nut and bolt to 95 N.m (70 lb ft).

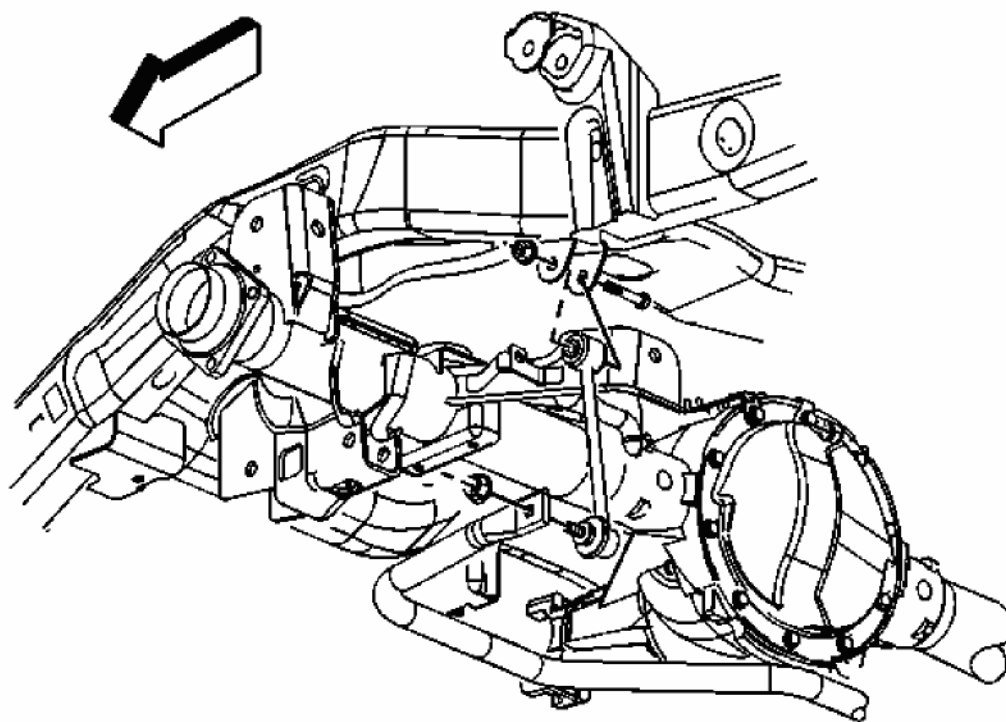


**Fig. 31: Stabilizer Shaft Link**  
Courtesy of GENERAL MOTORS CORP.

4. Install the stabilizer shaft link to the frame.
5. Install the stabilizer shaft link retaining nut.

**Tighten:** Tighten the stabilizer shaft link retaining nut to 65 N.m (48 lb ft).

6. Connect the electronic suspension control (ESC) sensor, if equipped. Refer to **Rear Position Sensor Link Assembly Replacement - Electronic Suspension** in Electronic Suspension Control (ESC).
7. Remove the rear axle support.
8. Lower the vehicle.

## SPRING BUSHING REPLACEMENT

### Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

2. Remove the leaf spring assembly from vehicle. Refer to **Leaf Spring Replacement**.

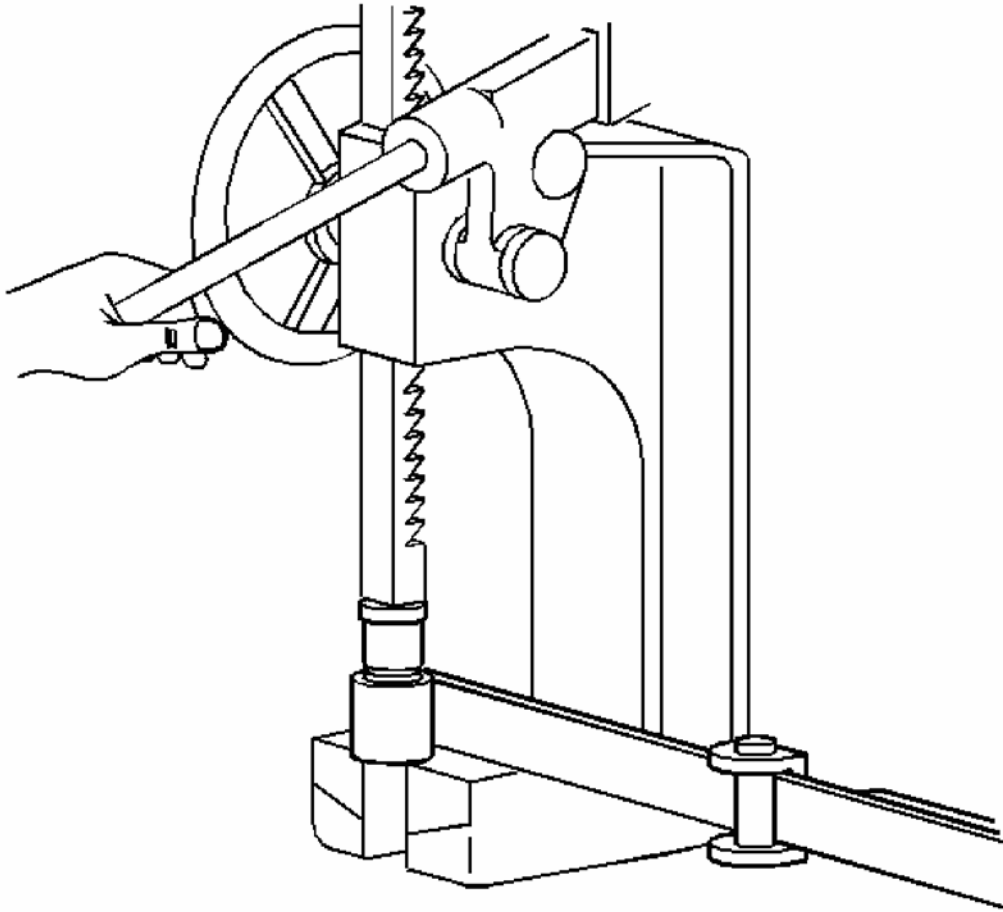


**Fig. 32: Removing Bushing From The Leaf Spring**  
Courtesy of GENERAL MOTORS CORP.

3. Remove the bushing from the leaf spring using the following procedure:
  1. Place the leaf spring in a press.
  2. Press the bushing out.
  3. Clean the spring bushing bore of any foreign or old bushing material.

**Installation Procedure**

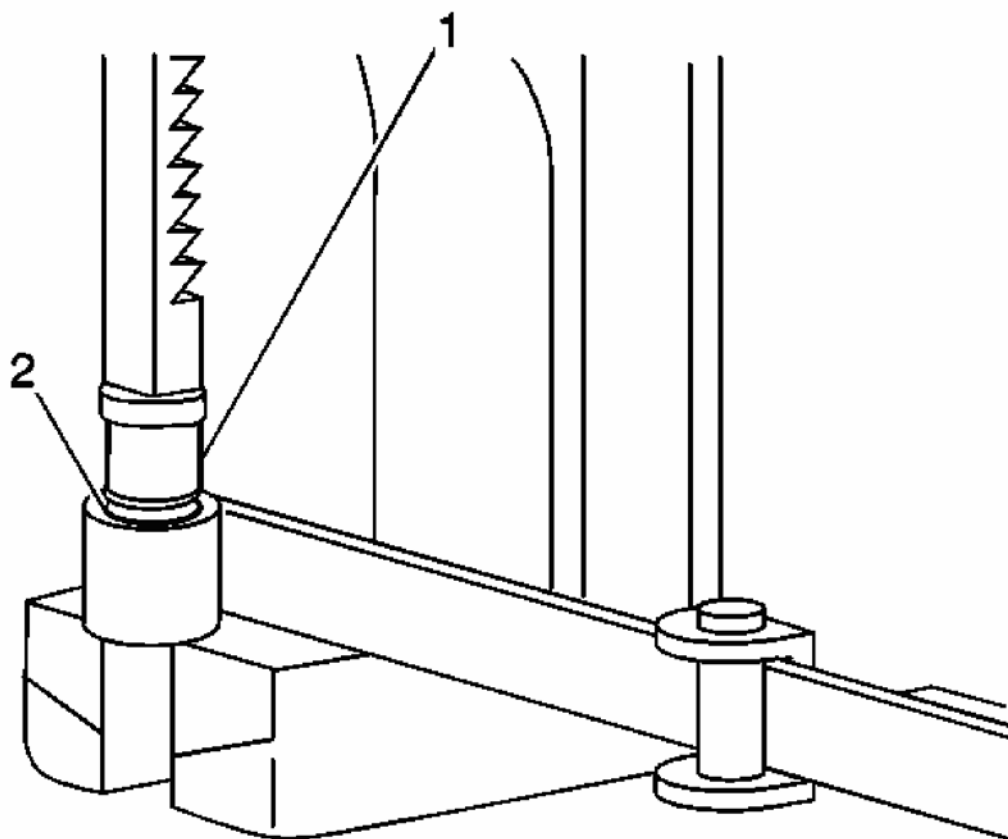


**Fig. 33: Bushing & Spring Eye**  
Courtesy of GENERAL MOTORS CORP.

1. Apply rubber lubricant to the bushing (1) and spring eye (2).
2. Install the bushing to the leaf spring.
  1. Place the leaf spring in a press.
  2. Press the bushing into the spring.
3. Install the leaf spring assembly to the vehicle. Refer to **Leaf Spring Replacement**.
4. Remove the safety stands.
5. Lower the vehicle.

## LEAF SPRING REPLACEMENT

### Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

2. Support the rear axle independently in order to relieve the tension on the leaf springs.
3. Disconnect the electronic suspension control (ESC) sensors, 25 series utilities, if equipped. Refer to **Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Right** in Electronic Suspension Control (ESC).
4. Remove the trailer hitch, if equipped. Refer to **Trailer Hitch Replacement** in Frame and Underbody.
5. Remove the fuel tank for left side applications. Refer to **Fuel Tank Replacement (Single Tank)** or **Fuel Tank Replacement (Single Tank w/5.3L (L59) Engine)** or **Fuel Tank Replacement (Dual Tanks - Front)** or **Fuel Tank Replacement (Dual Tanks - Rear)** in Engine Controls - 4.8L, 5.3L, 6.0L.

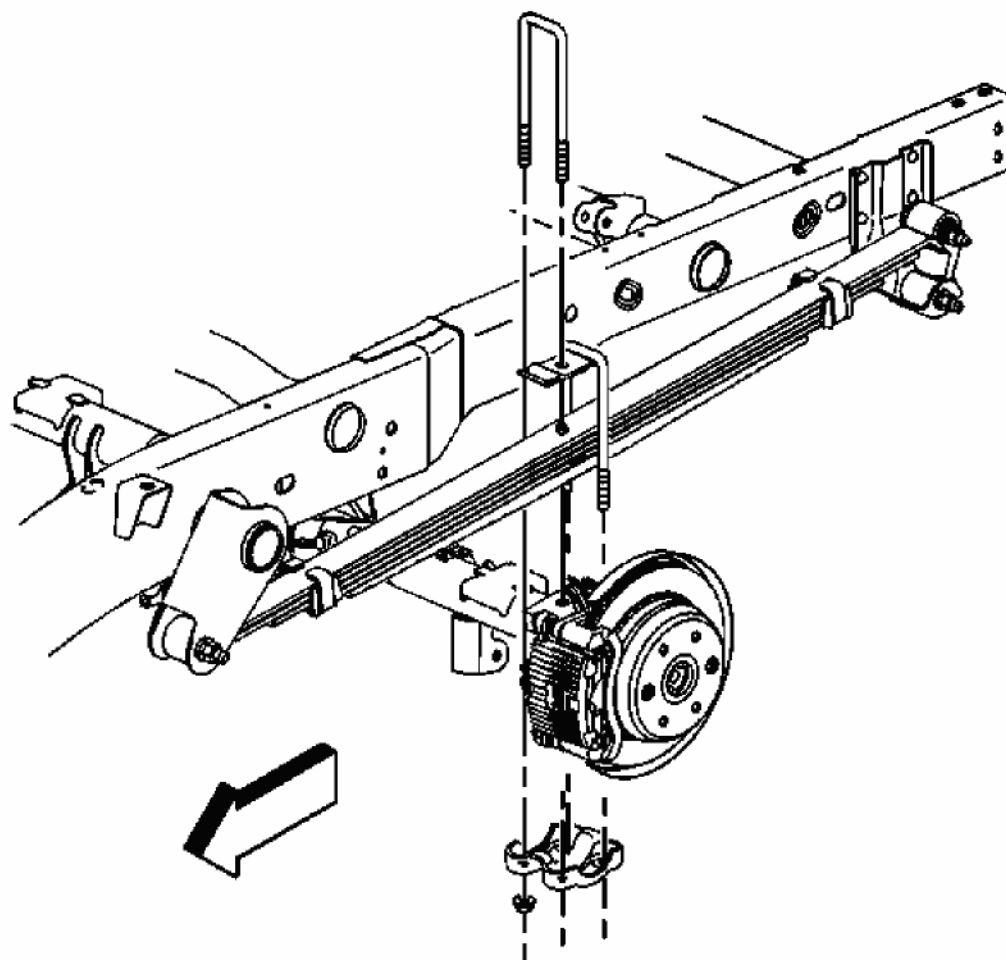


**Fig. 34: Identifying U-Bolts**  
Courtesy of GENERAL MOTORS CORP.

6. Remove the U-bolt nuts.
7. Remove the U-bolts.
8. Remove the spring spacer.
9. Remove the anchor plate.

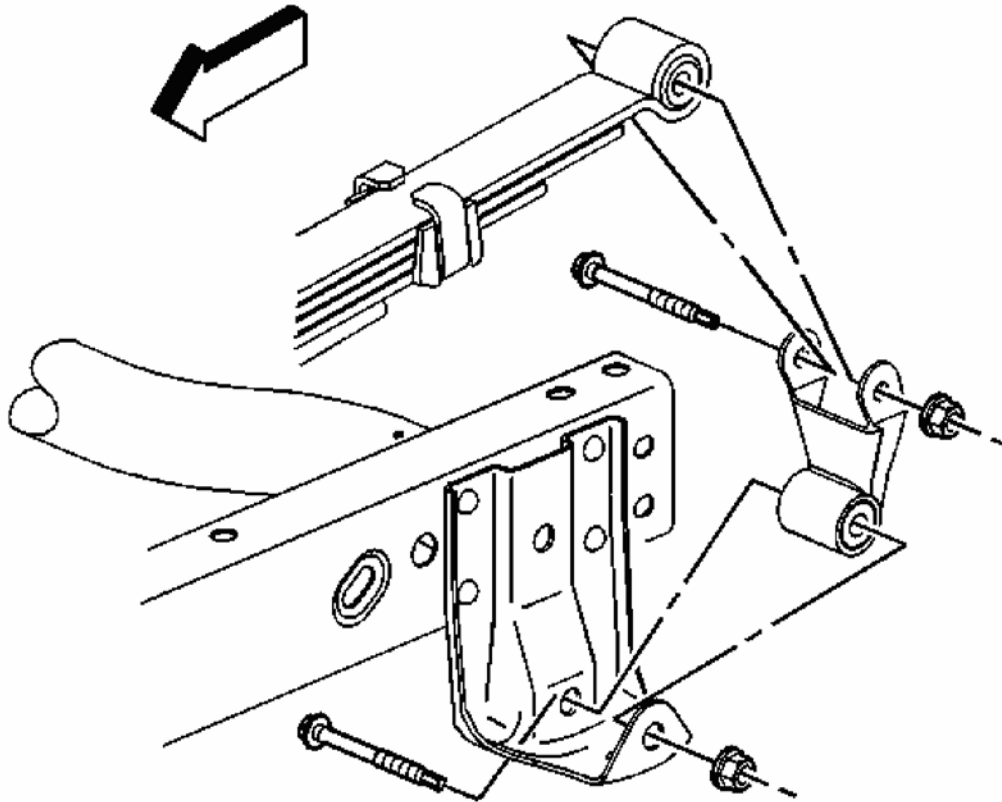


**Fig. 35: Rear Spring Bracket Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

10. Remove the rear spring bracket nut and bolt.

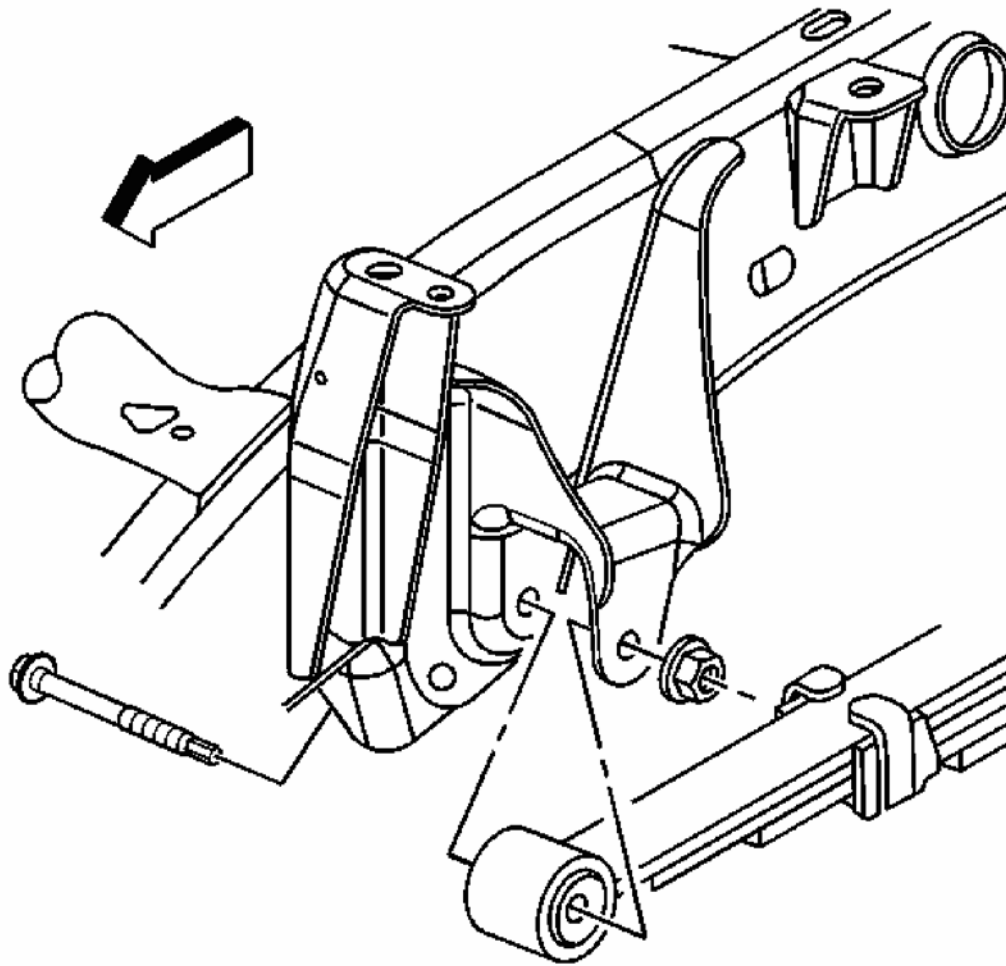


**Fig. 36: Front Spring Bracket Nut And Bolt**  
**Courtesy of GENERAL MOTORS CORP.**

11. Remove the front spring bracket nut and bolt.
12. Remove the leaf spring assembly from the vehicle.

**Installation Procedure**

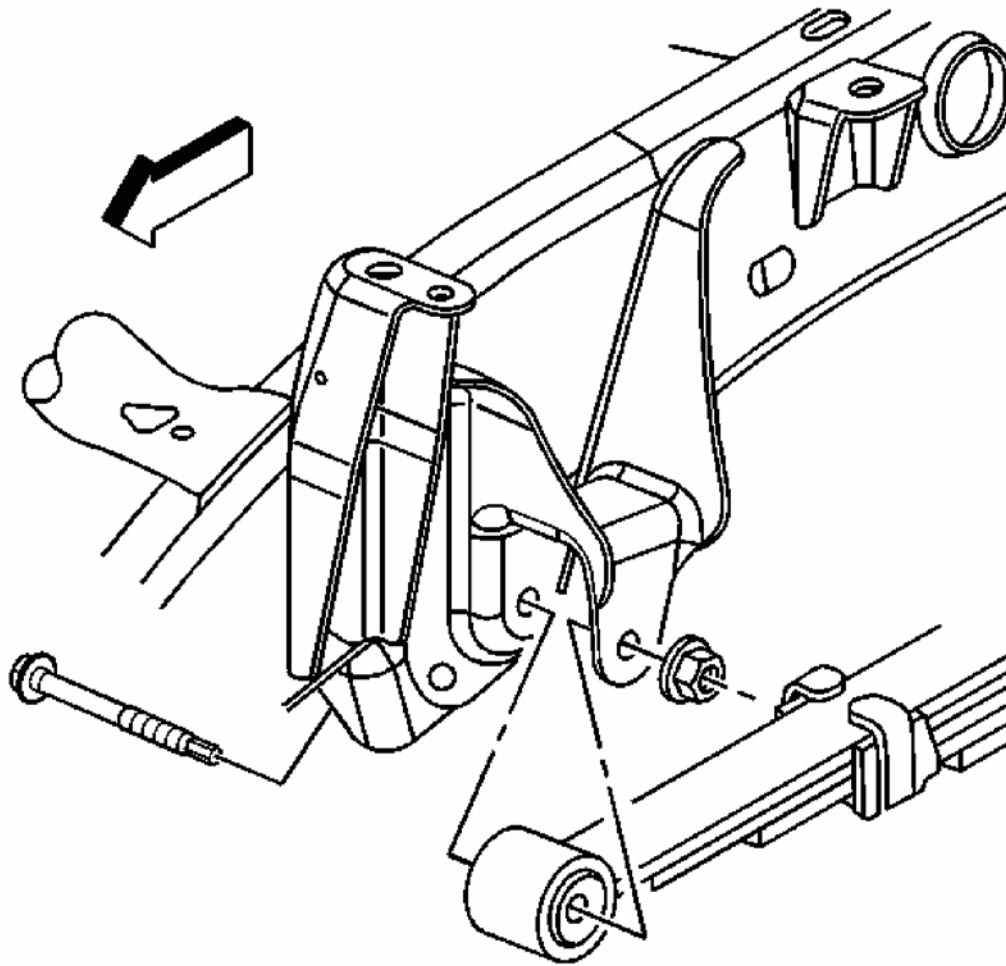


**Fig. 37: Front Spring Bracket Nut And Bolt**  
**Courtesy of GENERAL MOTORS CORP.**

1. Install the leaf spring assembly to the vehicle.
2. Loosely assemble the spring to the front hanger bracket.
3. Install the front spring hanger bracket bolt.
4. Install the front spring hanger bracket nut.

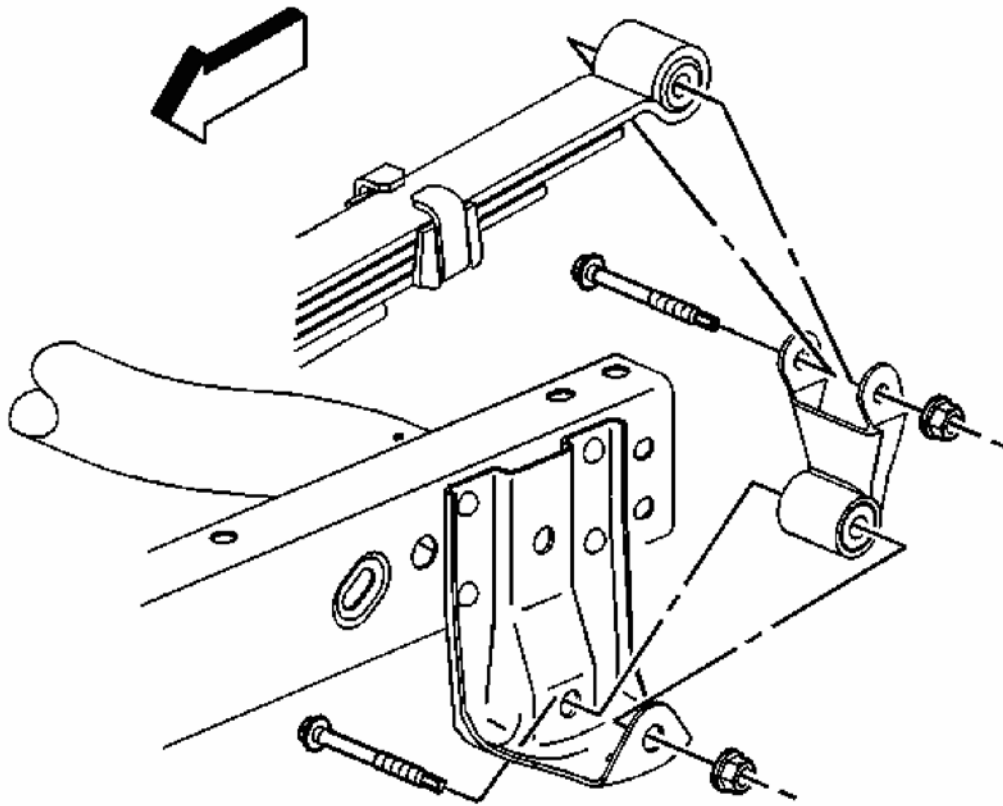


**Fig. 38: Rear Spring Bracket Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

5. Install the rear spring hanger bracket bolt.
6. Install the rear spring hanger bracket nut.

**IMPORTANT:** Do not reuse the U-bolts.

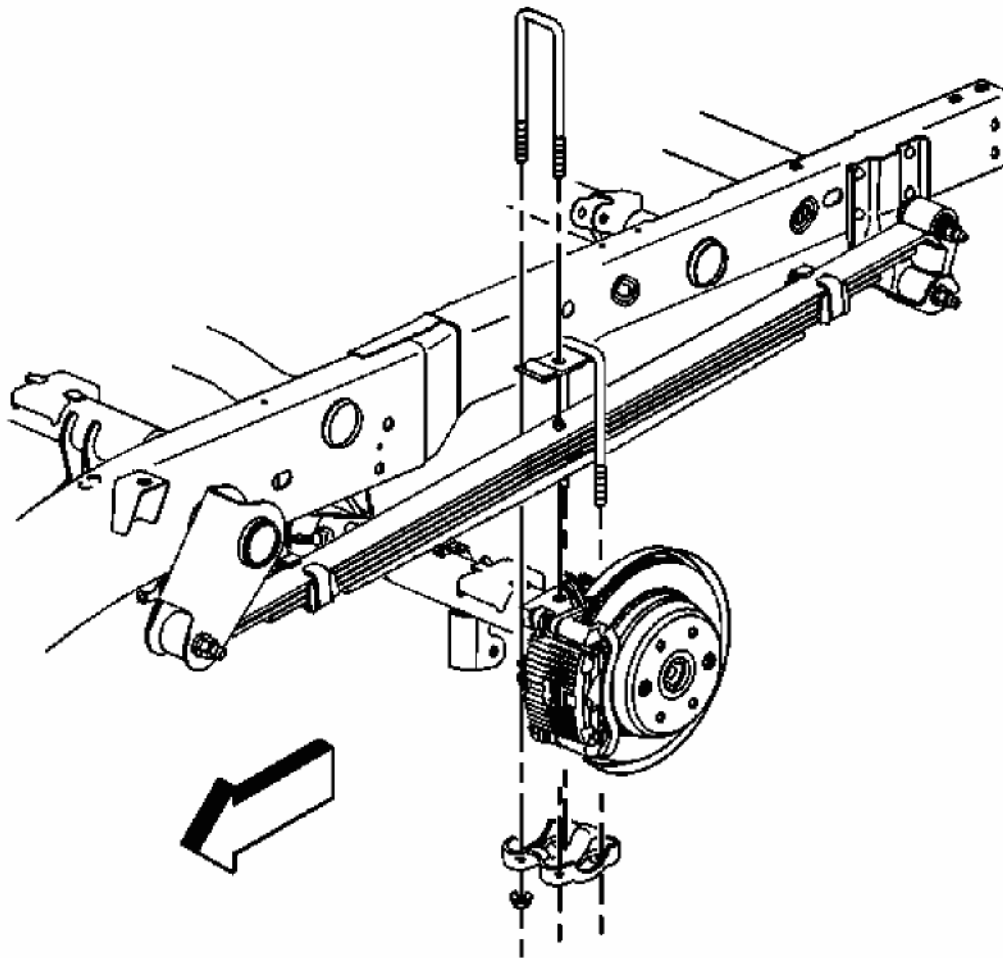


**Fig. 39: Identifying U-Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

7. Install the spring spacer.
8. Install the U-bolts.
9. Install the anchor plate.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

10. Install the U-bolt nuts.

**Tighten:**

- For 25 series without rear wheel steering, tighten the U-bolt nuts to 72 N.m (53 lb ft).

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### 2004 SUSPENSION Rear Suspension - C/K SUV

- For all 25 series including rear wheel steering, tighten the U-bolts to 150 N.m (110 lb ft).
  - Tighten the front hanger bracket nut to 150 N.m (110 lb ft).
  - Tighten the rear hanger bracket nut to 95 N.m (70 lb ft).
11. Install the fuel tank for left side applications. Refer to **Fuel Tank Replacement (Single Tank)** or **Fuel Tank Replacement (Single Tank w/5.3L (L59) Engine)** or **Fuel Tank Replacement (Dual Tanks - Front)** or **Fuel Tank Replacement (Dual Tanks - Rear)** in Engine Controls- 4.8L, 5.3L, 6.0L.
  12. Install the trailer hitch, if equipped. Refer to **Trailer Hitch Replacement** in Frame and Underbody.
  13. Connect the electronic suspension control (ESC) sensors, 25 series utilities, if equipped. Refer to **Rear Position Sensor Replacement - Electronic Suspension - Left (15 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Left (25 Series)** or **Rear Position Sensor Replacement - Electronic Suspension - Right** in Electronic Suspension Control (ESC).
  14. Remove the rear axle support.
  15. Remove the safety stands.
  16. Lower the vehicle.

## SPRING SHACKLE REPLACEMENT

### Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.

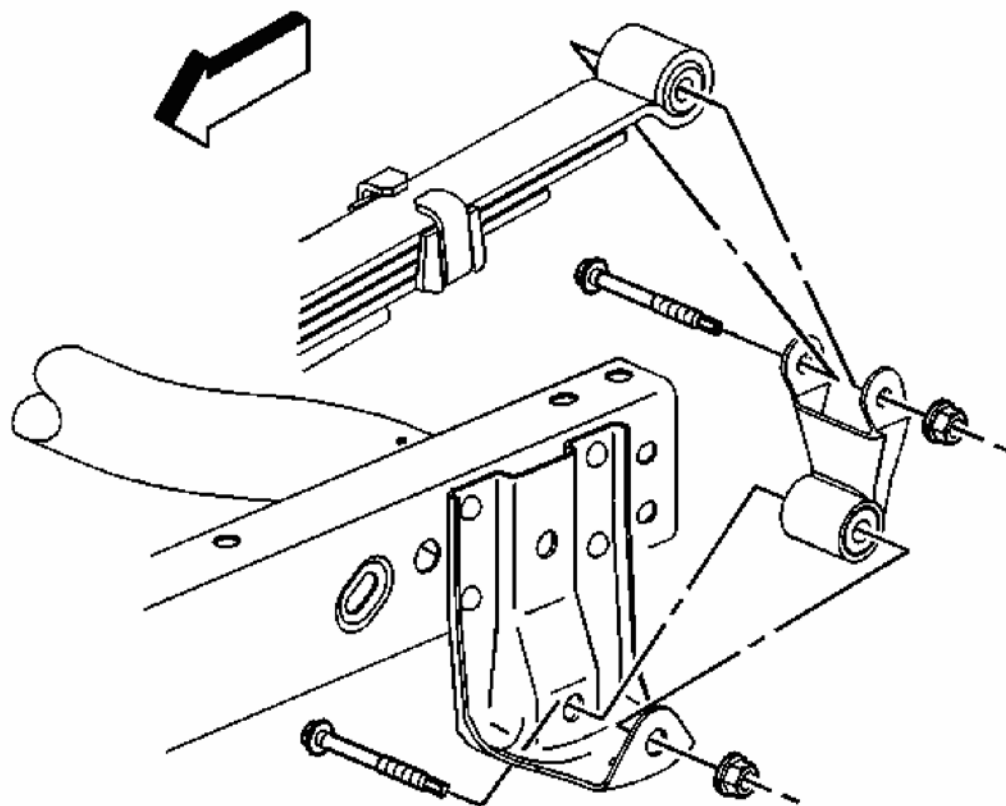


**Fig. 40: Rear Spring Bracket Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

2. Remove the leaf spring assembly from vehicle. Refer to **Leaf Spring Replacement**.
3. Remove the shackle nut and the bolt from the spring.

**Installation Procedure**

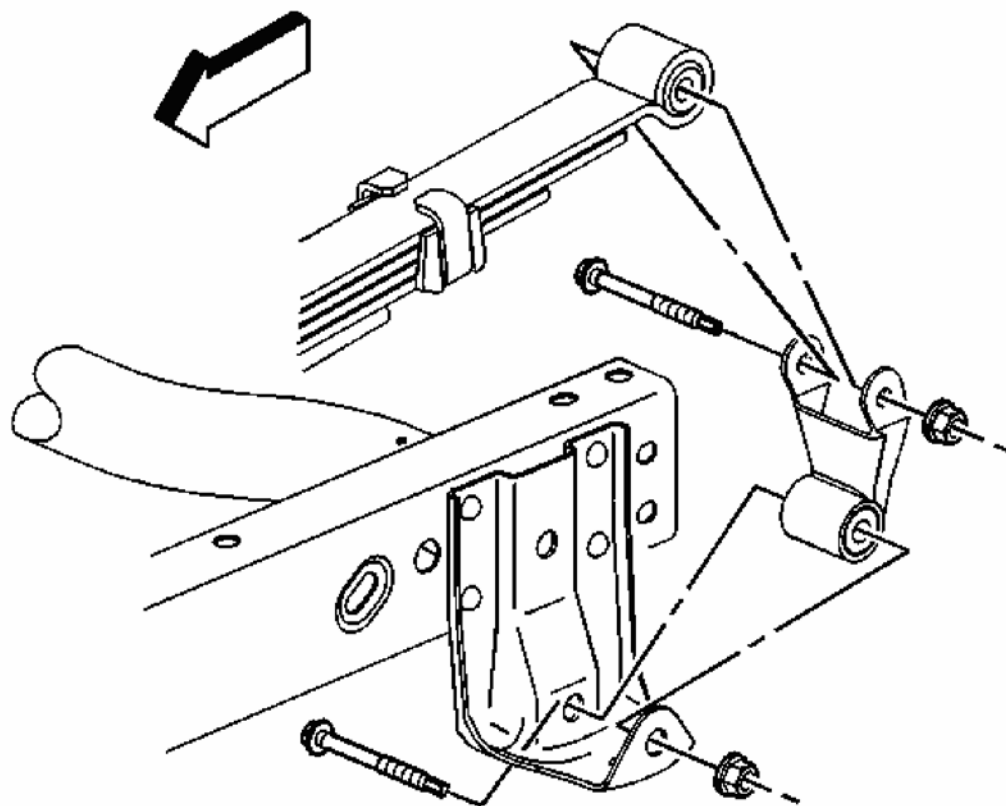


**Fig. 41: Rear Spring Bracket Nut And Bolt**  
Courtesy of GENERAL MOTORS CORP.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

1. Install the shackle to the spring.
2. Install the shackle nut and bolt to the spring.

**Tighten:** Tighten the shackle nut to 95 N.m (70 lb ft).

3. Install the leaf spring assembly to the vehicle. Refer to Leaf Spring Replacement.
4. Remove the safety stands.
5. Lower the vehicle.

## SPRING BUMPER REPLACEMENT

### Removal Procedure

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle in General Information.

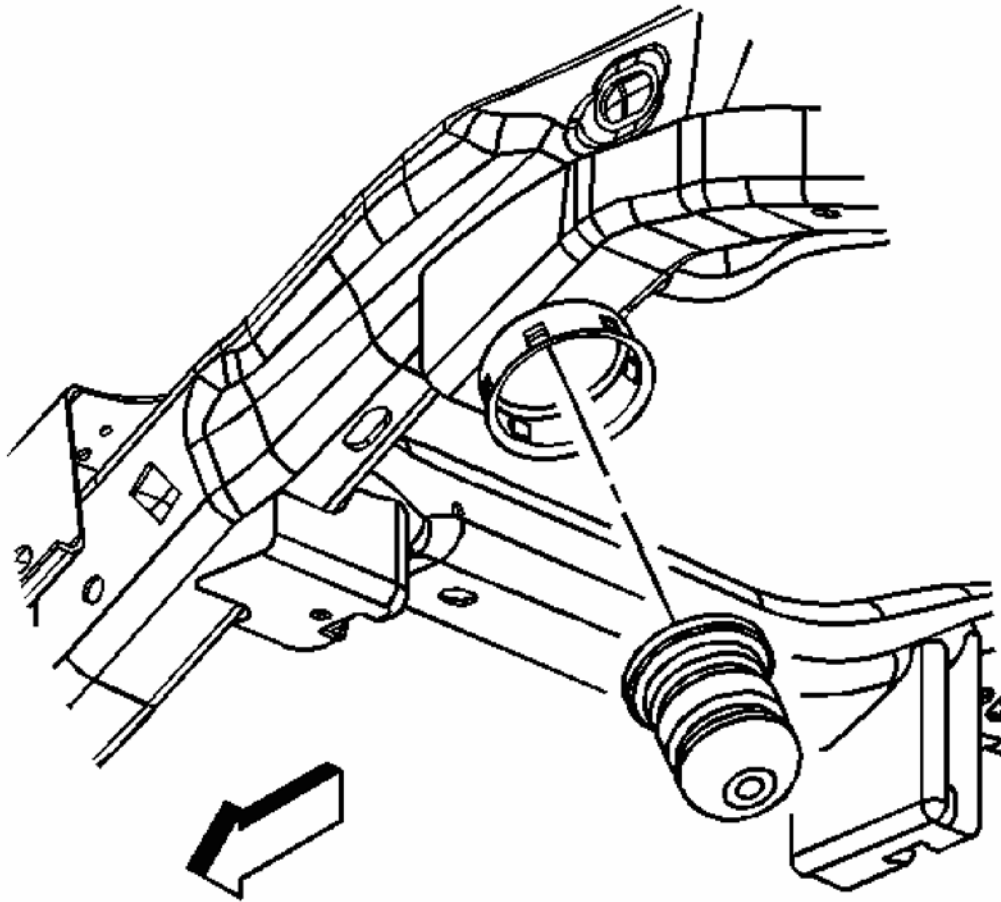


**Fig. 42: View Of Jounce Bumper**  
Courtesy of GENERAL MOTORS CORP.

2. Remove the jounce bumper mounting bolt.
3. Remove the jounce bumper. The 15 series utilities are snap fit.

#### Installation Procedure

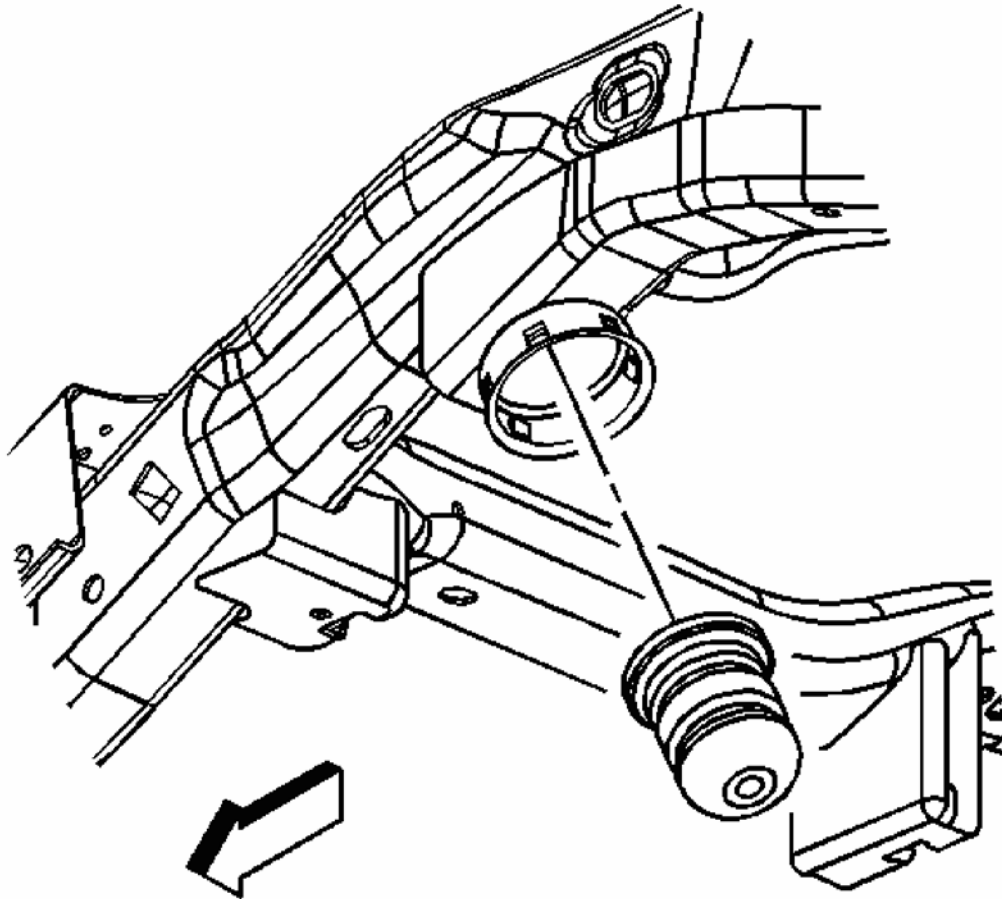


**Fig. 43: View Of Jounce Bumper**  
Courtesy of GENERAL MOTORS CORP.

1. Install the jounce bumper. The 15 series utilities are snap fit.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

2. Install the jounce bumper bolt.

**Tighten:** Tighten the bolt to 32 N.m (24 lb ft).

3. Remove the safety stands.
4. Lower the vehicle.

**Removal Procedure**

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Support the rear axle.

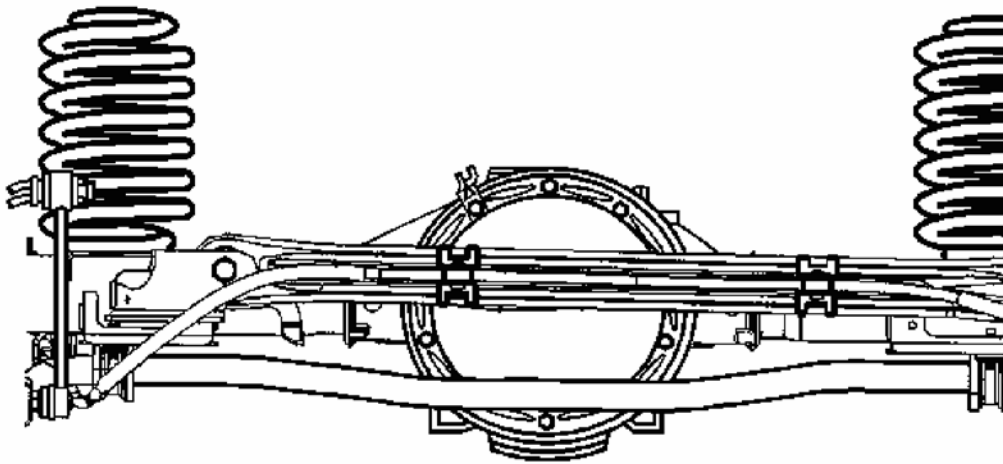


**Fig. 44: Park Brake Cable & Retaining Clips At Track Bar**  
**Courtesy of GENERAL MOTORS CORP.**

3. Remove the park brake cable retaining clips to remove the parking brake cable from the track bar.

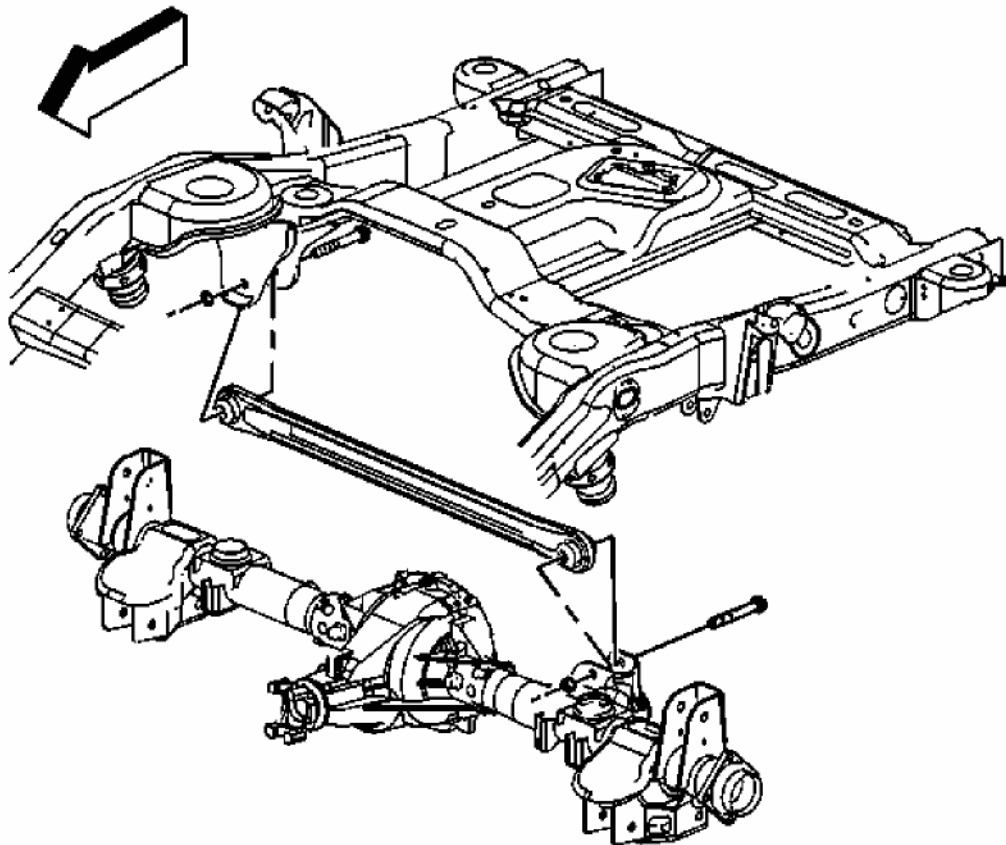


**Fig. 45: Track Bar, Retaining Nuts & Bolts**  
**Courtesy of GENERAL MOTORS CORP.**

4. Remove the track bar retaining nuts.
5. Remove the track bar retaining bolts.
6. Remove the track bar from the vehicle.

**Installation Procedure**

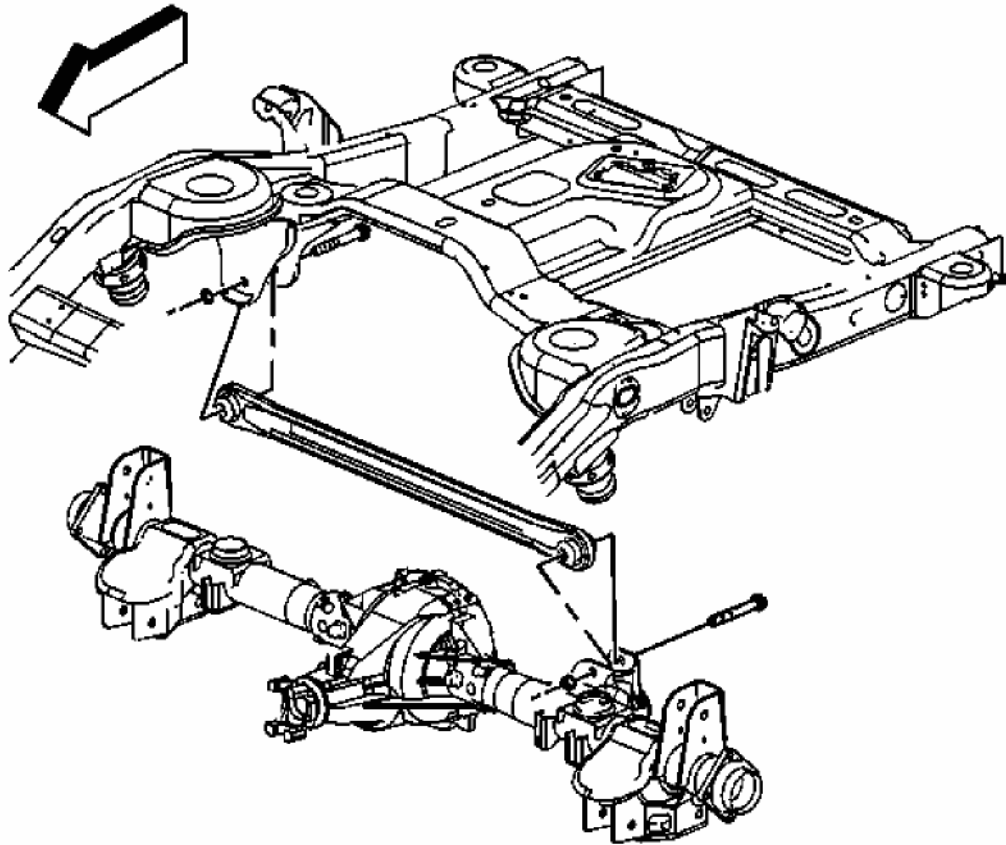


**Fig. 46: Track Bar, Retaining Nuts & Bolts**  
Courtesy of GENERAL MOTORS CORP.

1. Install the track bar to the vehicle.
2. Install the track bar retaining bolts.

**NOTE:** Refer to Fastener Notice in Cautions and Notices.

**IMPORTANT:** Do not tighten the bolts unless the suspension is at the curb height position.

3. Install the track bar retaining nuts.

**Tighten:** Tighten the bolts to 105 N.m (77 lb ft).

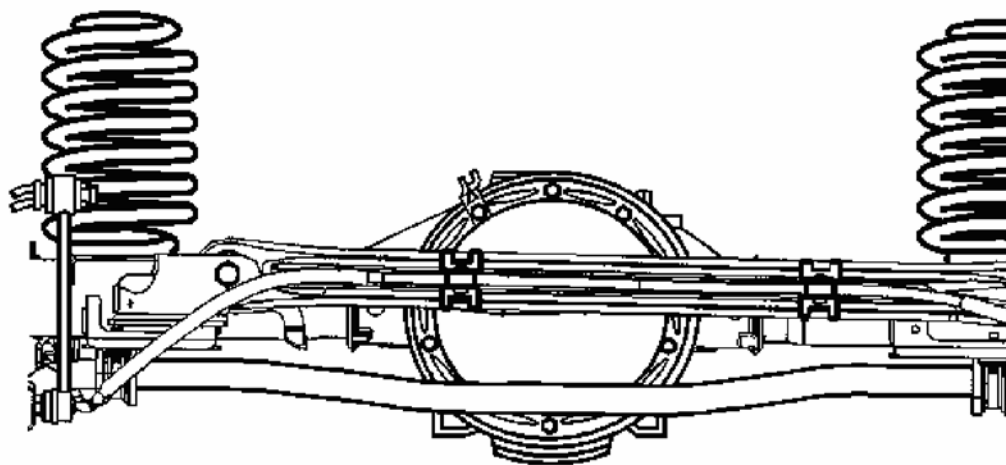


**Fig. 47: Park Brake Cable & Retaining Clips At Track Bar**  
Courtesy of GENERAL MOTORS CORP.

4. Install the parking brake cable and retaining clips to the track bar.
5. Remove the rear axle support.
6. Lower the vehicle.

## **WHEEL STUD REPLACEMENT**

### **Tools Required**

**J 43631** Ball Joint Remover

### **Removal Procedure**

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** in General Information.
2. Remove the tire and wheel. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
3. Remove the rotor, except dual wheel vehicles. Refer to **Brake Rotor Replacement - Rear (W/NYS)** or **Brake Rotor Replacement - Rear (W/O NYS)** in Disc Brakes.

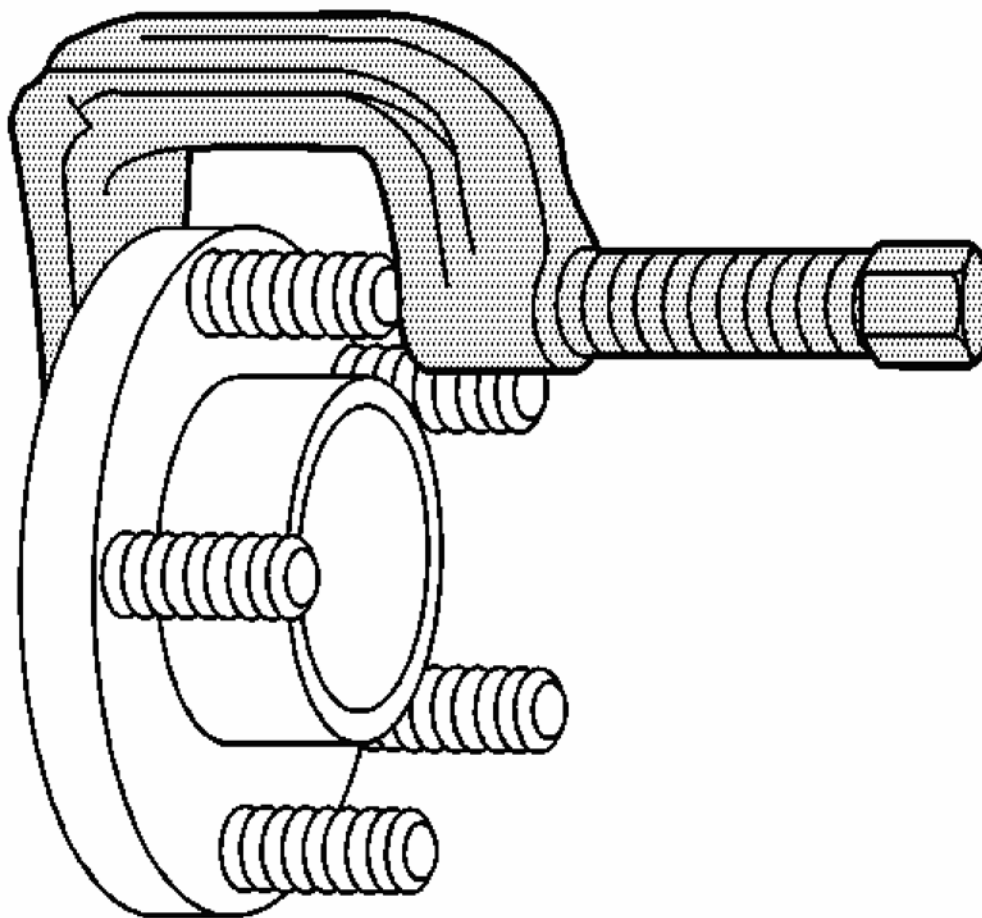


**Fig. 48: Removing Wheel Stud From Axle Flange**  
Courtesy of GENERAL MOTORS CORP.

4. Remove the wheel stud from the axle flange using the **J 43631** .
5. Remove the axle shaft for vehicles with 9.5 in ring gear. Refer to **Rear Axle Shaft Replacement (8.6 Inch Axle W/O JL4, 9.5 Inch Axle)** or **Rear Axle Shaft Replacement (8.6 Inch Axle W/JL4)** or **Rear Axle Shaft Replacement (9.75 Inch Axle)** in Rear Drive Axle.
6. Remove the rear hub assembly for vehicles with 10.5/11.5 in ring gear, with single wheels. Refer to **Rear Axle Shaft Replacement (8.6 Inch Axle W/O JL4, 9.5 Inch Axle)** or **Rear Axle Shaft Replacement (8.6 Inch Axle W/JL4)** or **Rear Axle Shaft Replacement (9.75 Inch Axle)** in Rear Drive Axle.
7. Remove the rear axle hub for vehicles with dual wheels. Refer to **Rear Axle Hub, Bearing, Cup, and/or Seal Replacement** .

8. Remove the wheel stud from the axle flange using the **J 43631** .
9. Remove the wheel stud from the hub flange using the **J 43631** .

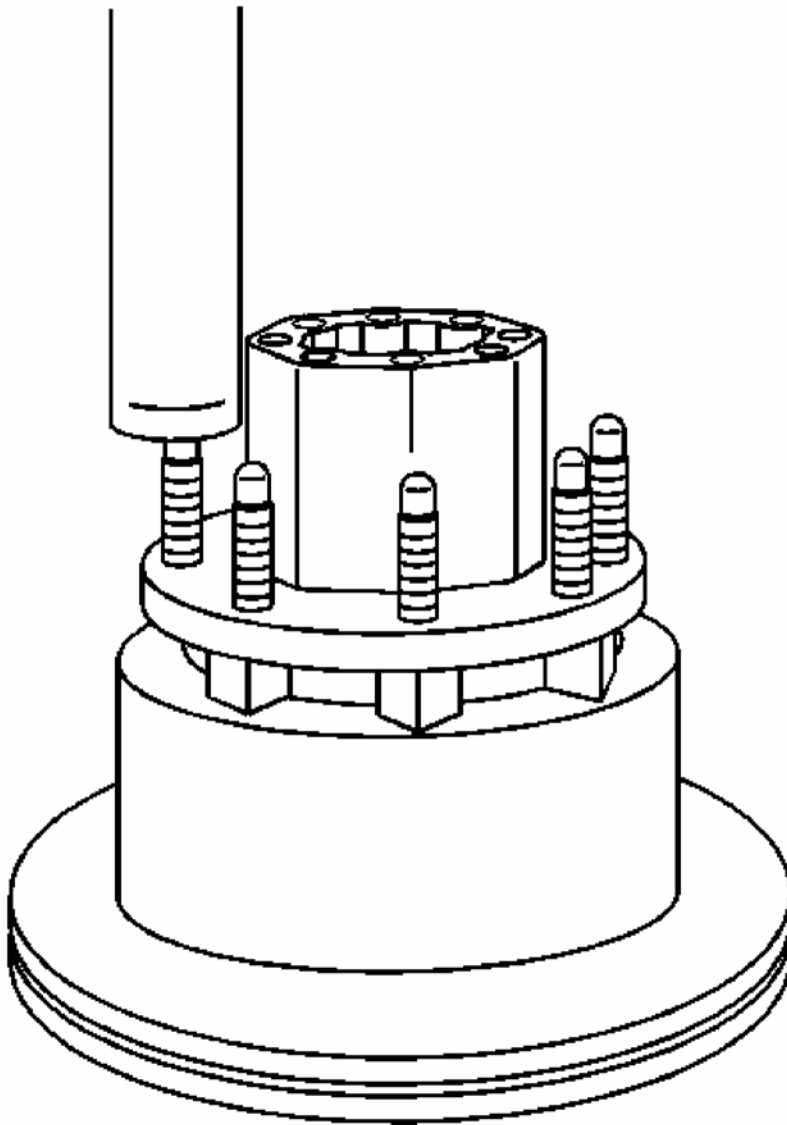


**Fig. 49: Removing Wheel Studs Using Press**  
**Courtesy of GENERAL MOTORS CORP.**

10. Place the hub and rotor assembly in a press to remove the wheel stud.

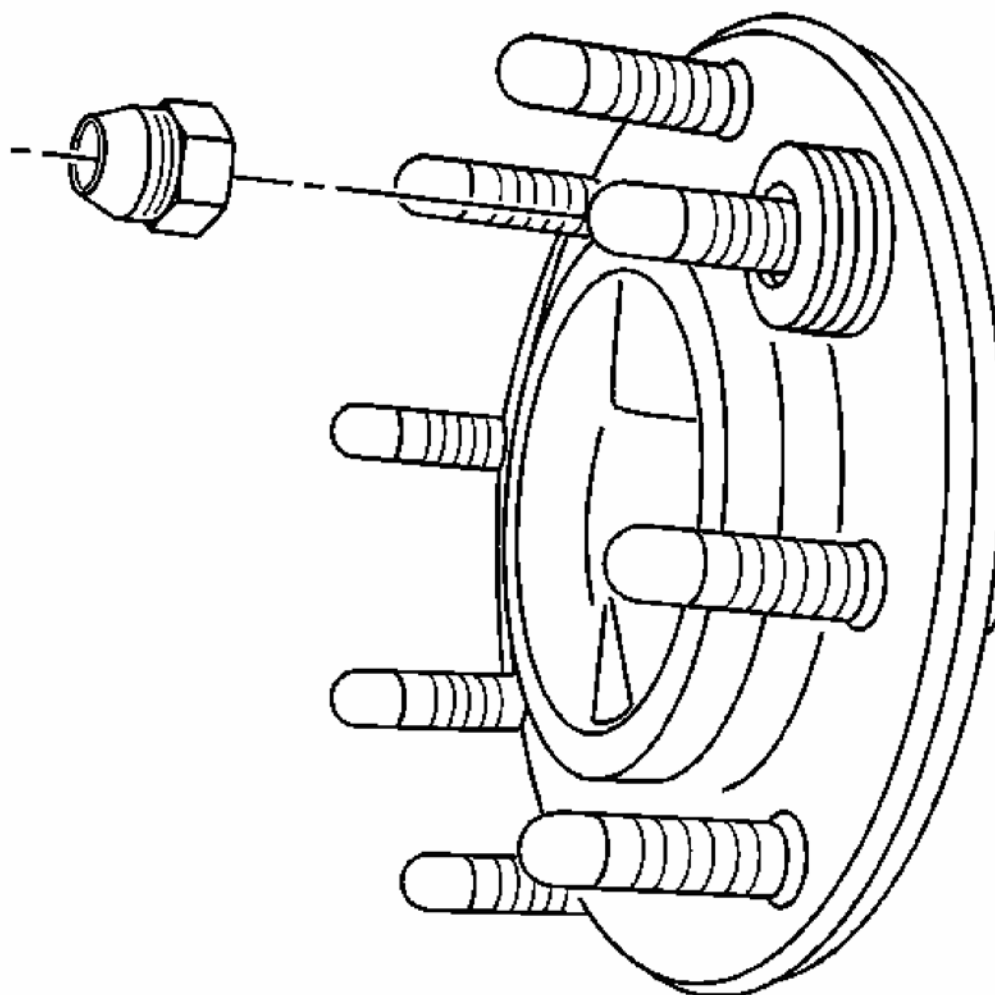


**Fig. 50: View Of Wheel Studs, Hub & Rotor Assembly - Rear (W/Dual Wheels)**  
**Courtesy of GENERAL MOTORS CORP.**

1. Install the stud.
2. Install the 4 washers and the lug nut to the stud.
3. Tighten the lug nut in order to draw the stud into the flange until the stud fully seats.
4. Remove the lug nut and the washers.
5. Install the axle shaft for the vehicles with 9.5 in ring gear. Refer to **Rear Axle Shaft Replacement (8.6 Inch Axle W/O JL4, 9.5 Inch Axle)** or **Rear Axle Shaft Replacement (8.6 Inch Axle W/JL4)** or **Rear Axle Shaft Replacement (9.75 Inch Axle)** in Rear Drive Axle.
6. Install the rear hub assembly for the vehicles with 10.5/11.5 in ring gear, with single

wheels. Refer to **Rear Axle Shaft Replacement (8.6 Inch Axle W/O JL4, 9.5 Inch Axle)** or **Rear Axle Shaft Replacement (8.6 Inch Axle W/JL4)** or **Rear Axle Shaft Replacement (9.75 Inch Axle)** in Rear Drive Axle.

7. Install the rear axle hub for vehicles with dual wheels. Refer to **Rear Axle Hub, Bearing, Cup, and/or Seal Replacement** .
8. Install the rotor, except dual wheels. Refer to **Brake Rotor Replacement - Rear (W/NYS)** or **Brake Rotor Replacement - Rear (W/O NYS)** in Disc Brakes.
9. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation** in Tires and Wheels.
10. Remove the safety stands.
11. Lower the vehicle.

## DESCRIPTION AND OPERATION

### GENERAL DESCRIPTION

All pickup models and 25 series Utility models use a rear spring suspension system and a solid rear axle suspension system. The rear axle is attached to the multi-rear springs by U-bolts. The front of the spring ends are attached to the frame at the front hangers through rubber bushings. The rear of the spring ends are attached to the frame with shackles that allow the springs to change their length, due to the spring compressing, while the vehicle is in motion. The ride control is provided by 2 identical direct dual-action shock absorbers that are angle-mounted between the frame and the brackets which are attached to the axle tubes.

All 15 series utility vehicles use a 5-link rear suspension system. The rear axle is attached to the frame with the upper control arms, lower control arms, and a track bar. Two coil springs and a link mounted rear stabilizer shaft complete the system.

## SPECIAL TOOLS AND EQUIPMENT

### SPECIAL TOOLS

#### Special Tools

| Illustration | Tool Number/ Description      |
|--------------|-------------------------------|
|              | J 43631<br>Ball Joint Remover |

## 2004 Cadillac Escalade

2004 SUSPENSION Rear Suspension - C/K SUV



## 2004 Cadillac Escalade

2004 SUSPENSION Rear Suspension - C/K SUV