SUSPENSION

Rear Suspension - Escalade, Suburban, Tahoe, Yukon

SPECIFICATIONS

FASTENER SPECIFICATIONS

Application	Specification	
	Metric	English
Lower Control Arm Bolt		
• First Pass	100 N.m	63 lb ft
• Final Pass	95 degrees	
Rear Axle Lateral Link Bolt (to Axle)		
• First Pass	85 N.m	63 lb ft
• Final Pass	125 degrees	
Rear Axle Lateral Link Bolt (to Frame)		
• First Pass	85 N.m	63 lb ft
• Final Pass	125 degrees	
Rear Leaf Spring Nut		
• First Pass	170 N.m	125 lb ft
• Final Pass	45-51 degrees	
Rear Leaf Spring To Shackle Nut	103 N.m	76 lb ft
Rear Axle U-Bolt Nut		

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Application	Specification	
	Metric	English
• First Pass	140 N.m	103 lb ft
• Final Pass	90-105 degrees	
Shock Absorber Nut	115 N.m	85 lb ft
Stabilizer Shaft Insulator Clamp Bolt	32 N.m	24 lb ft
Stabilizer Shaft Link Nut		
• First Pass	65 N.m	48 lb ft
• Final Pass	40 degrees	
Rear Suspension Upper Trailing Link Bolt		
• First Pass	100 N.m	74 lb ft
• Final Pass	55 degrees	

REPAIR INSTRUCTIONS

STABILIZER SHAFT REPLACEMENT

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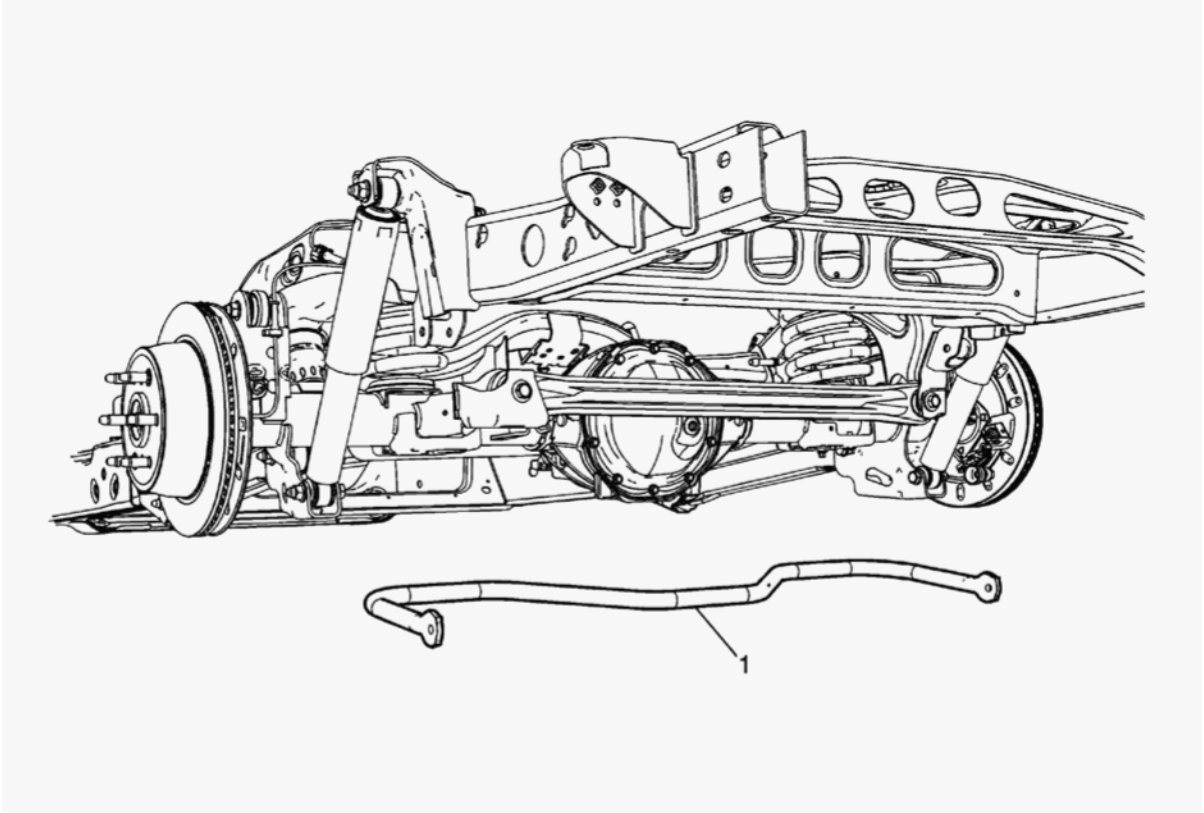

Fig. 1: Stabilizer Shaft
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedures 1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** . 2. Remove the rear stabilizer shaft link. Refer to **Stabilizer Shaft Link Replacement**. 3. Remove the rear stabilizer shaft insulator. Refer to **Stabilizer Shaft Insulator Replacement**.	
1	Rear Stabilizer Shaft

STABILIZER SHAFT INSULATOR REPLACEMENT

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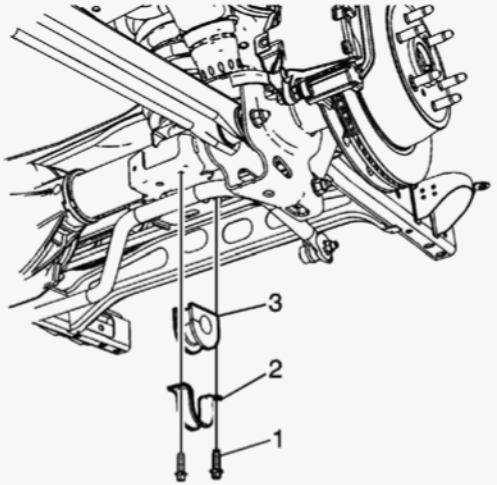

Fig. 2: Stabilizer Shaft Insulator
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .	
1	Rear Stabilizer Shaft Insulator Bolt (Qty: 2) **CAUTION:** **Refer to** **Fastener** **Caution** . **Tighten** 32 N.m (24 lb ft)
2	Rear Stabilizer Shaft Insulator Clamp
3	Rear Stabilizer Shaft Insulator **TIP:** Ensure that the slit in the insulator is facing the front of the vehicle.

STABILIZER SHAFT LINK REPLACEMENT

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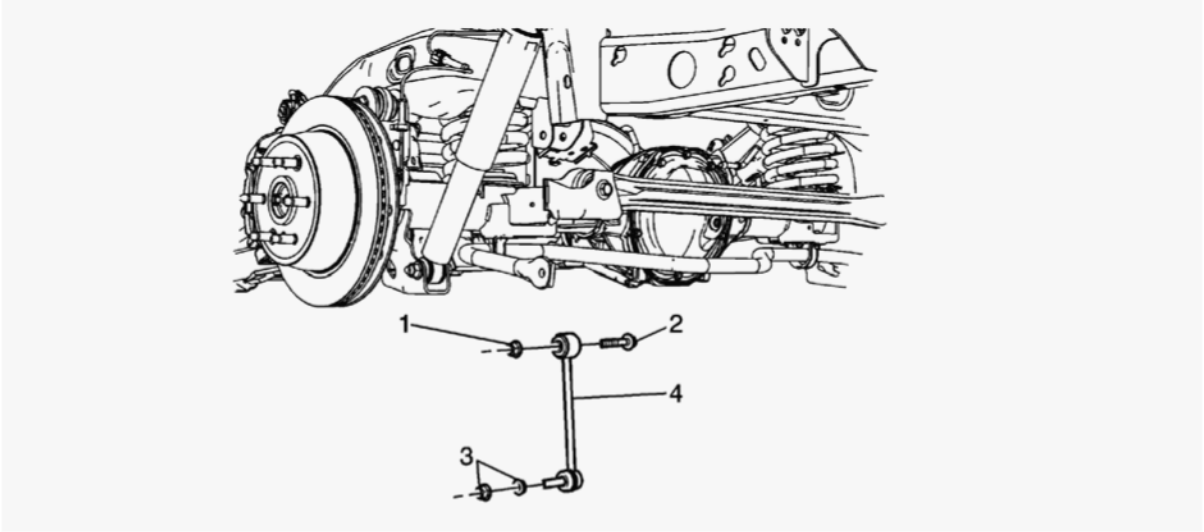

Fig. 3: Stabilizer Shaft Link
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .	
1	Rear Upper Stabilizer Shaft Link Nut **CAUTION:** **Refer to** **Fastener** **Caution** . **Tighten** 65 N.m (48 lb ft) plus 40 degrees
2	Rear Upper Stabilizer Shaft Link Bolt
3	Rear Lower Stabilizer Shaft Nut (Qty: 2) **Procedure**

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Callout	Component Name
	1. Use an Allen wrench to keep the lower stabilizer shaft ball stud from rotating while removing the outer nut. 2. When installing the inner stabilizer shaft link nut, ensure that it is tighten securely against the ball joint. **Tighten** 65 N.m (48 lb ft) plus 40 degrees
4	Rear Stabilizer Shaft

STRUT AND SHOCK ABSORBER INSPECTION (SHOCK ABSORBER)

NOTE: **The shock absorber assembly DOES NOT have to be removed from the vehicle to perform the following inspection procedure.**

NOTE: **A light film of oil on the top portion of the lower shock absorber tube is normal. DO NOT replace the shock absorber for this condition.**

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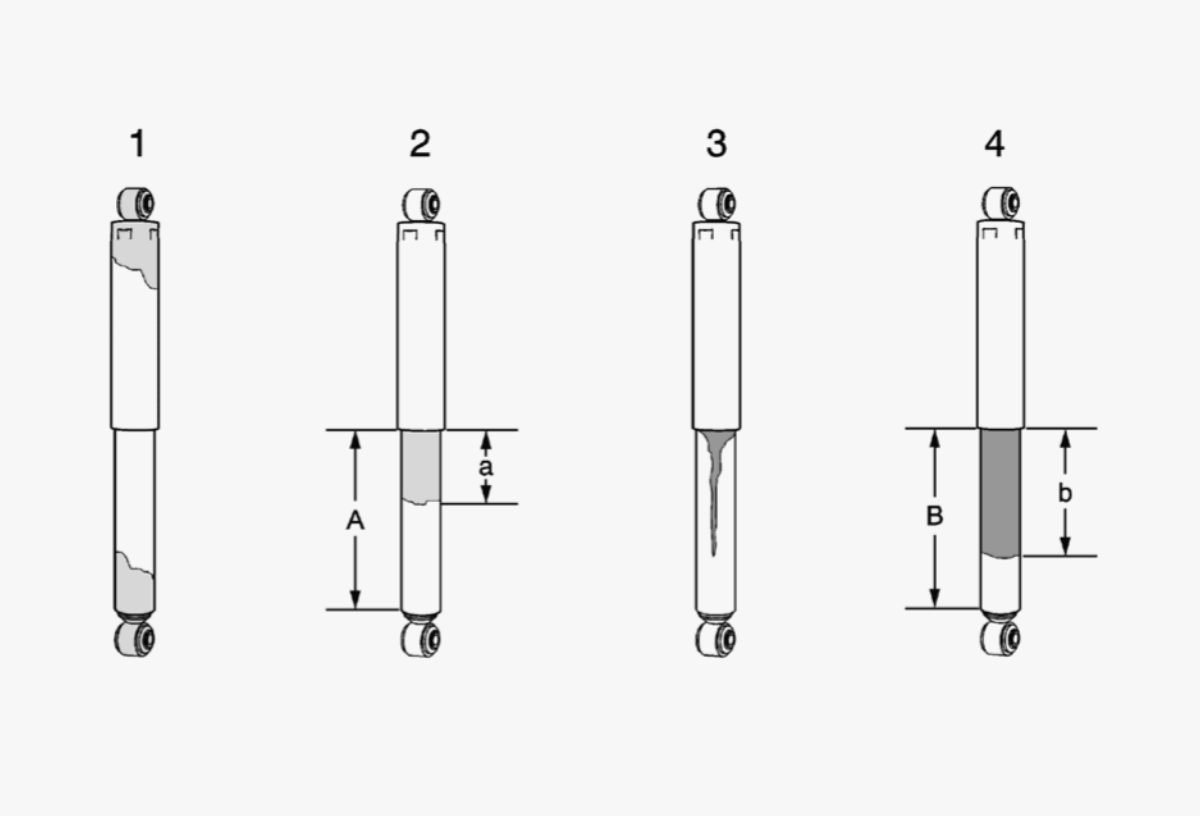

Fig. 4: Identifying Shock Absorber Conditions
Courtesy of GENERAL MOTORS COMPANY

Condition 1

Oil or fluid residue only on the bottom or top of the shock absorber and not originating from the shaft seal, is not a shock absorber related problem. DO NOT replace the shock absorber, look for other external leaks.

Condition 2

Light film/residue on approximately 1/3 (a) or less of the lower shock tube (A) and originating from the shaft seal, is a NORMAL condition. DO NOT replace the shock absorber.

Condition 3

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Oil drip or trail down the lower shock tube and originating from the shaft seal, is an ABNORMAL condition. Replace the shock absorber.

Condition 4

An extreme wet film of oil covering more than 1/3 (b) of the lower shock tube and originating from the shaft seal (B), is an ABNORMAL condition. Replace the shock absorber.

Inspection

1. Verify the customer's concern is present. If the concern is present, continue to the next step. If the concern is not present, then the vehicle is operating normally.

NOTE: **The shock absorber assembly DOES NOT have to be removed from the vehicle to perform the following inspection procedure.**

2. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
3. Visually inspect each of the shock absorbers for external fluid leaks. Refer to the following conditions 1, 2, 3, and 4 for visual inspection.
   - If conditions 1 or 2 are found, continue to step 4.
   - If conditions 3 or 4 are found, replace shock absorber.
4. If equipped with electronic suspension control system, ensure that the system is working properly. Refer to Diagnostic Starting Point - Electronic Suspension Control.
5. Use your hands in order to lift up and push down on each corner of the vehicle 3 times. Remove your hands from the vehicle. If the corner motion exceeds 2 cycles, replace the shock absorber. If the shock absorber does not exceed 2 cycles, NO repair is necessary.

SHOCK ABSORBER REPLACEMENT (Z56, Z71, ZW7)

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Support the rear axle assembly with the proper jack stand.

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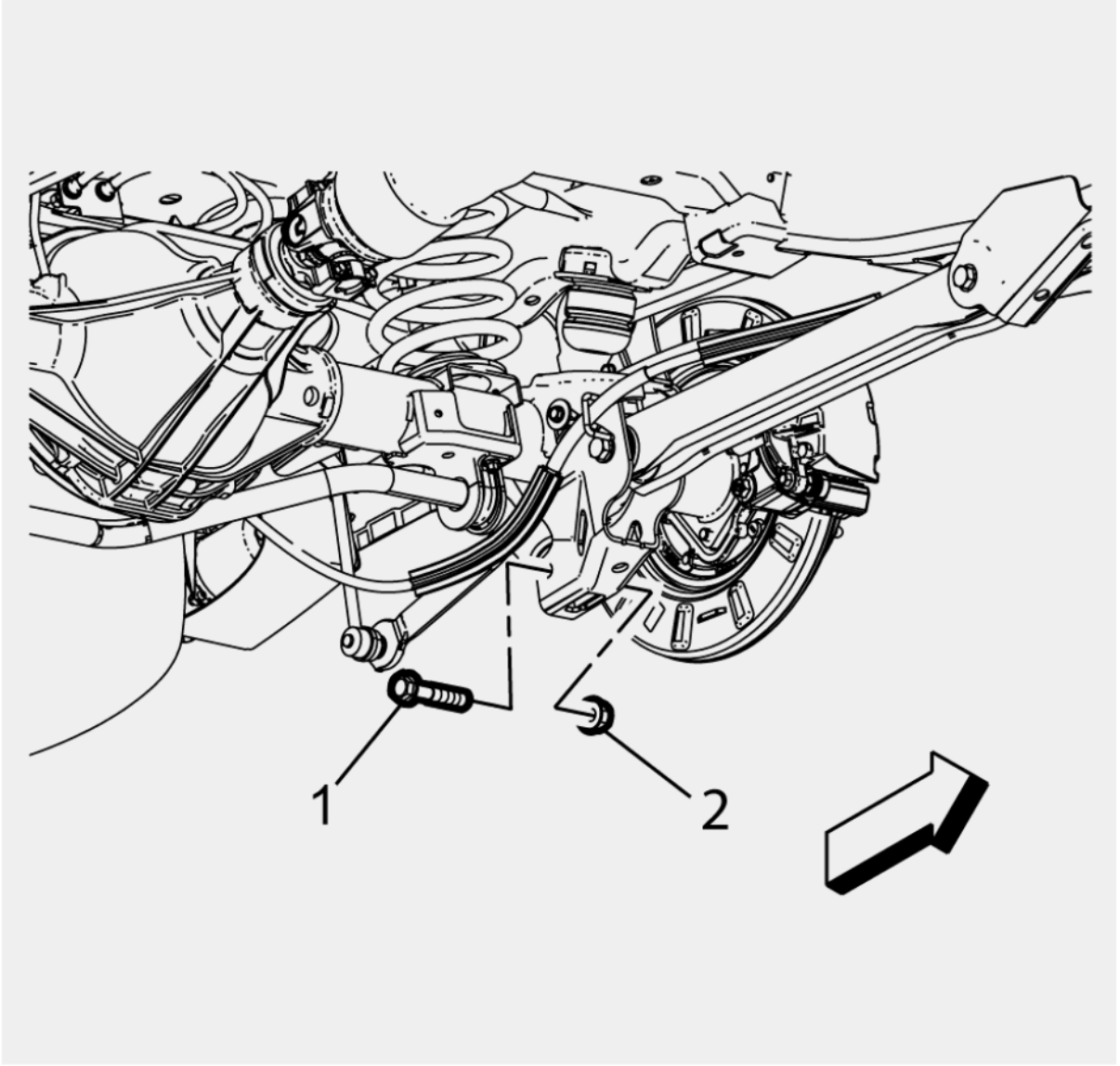

Fig. 5: Lower Shock Absorber Bolt And Nut
Courtesy of GENERAL MOTORS COMPANY

3. Remove the lower shock absorber bolt (1) and nut (2).

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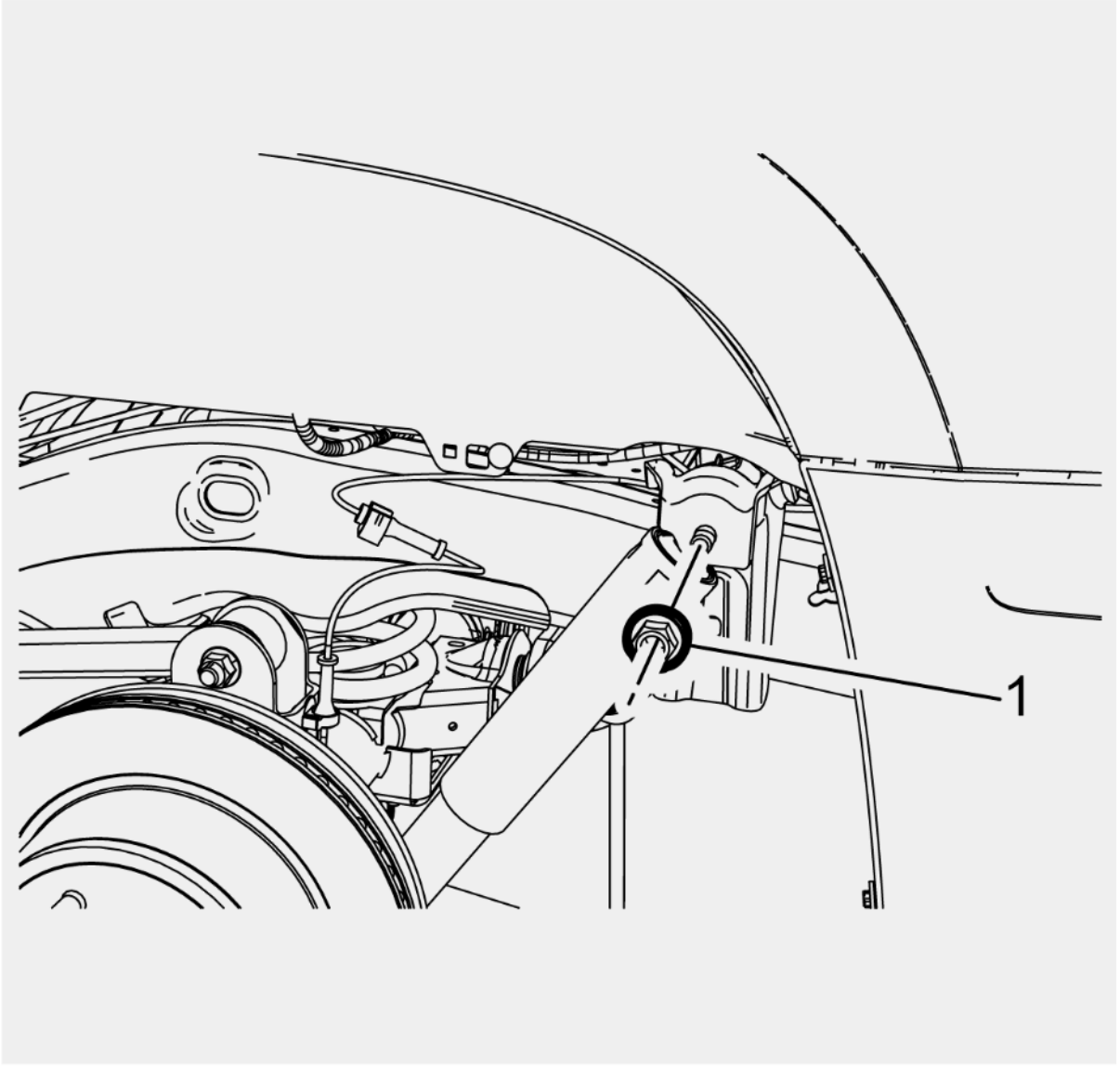

Fig. 6: Upper Shock Absorber Nut
Courtesy of GENERAL MOTORS COMPANY

4. Remove the upper shock absorber nut (1).

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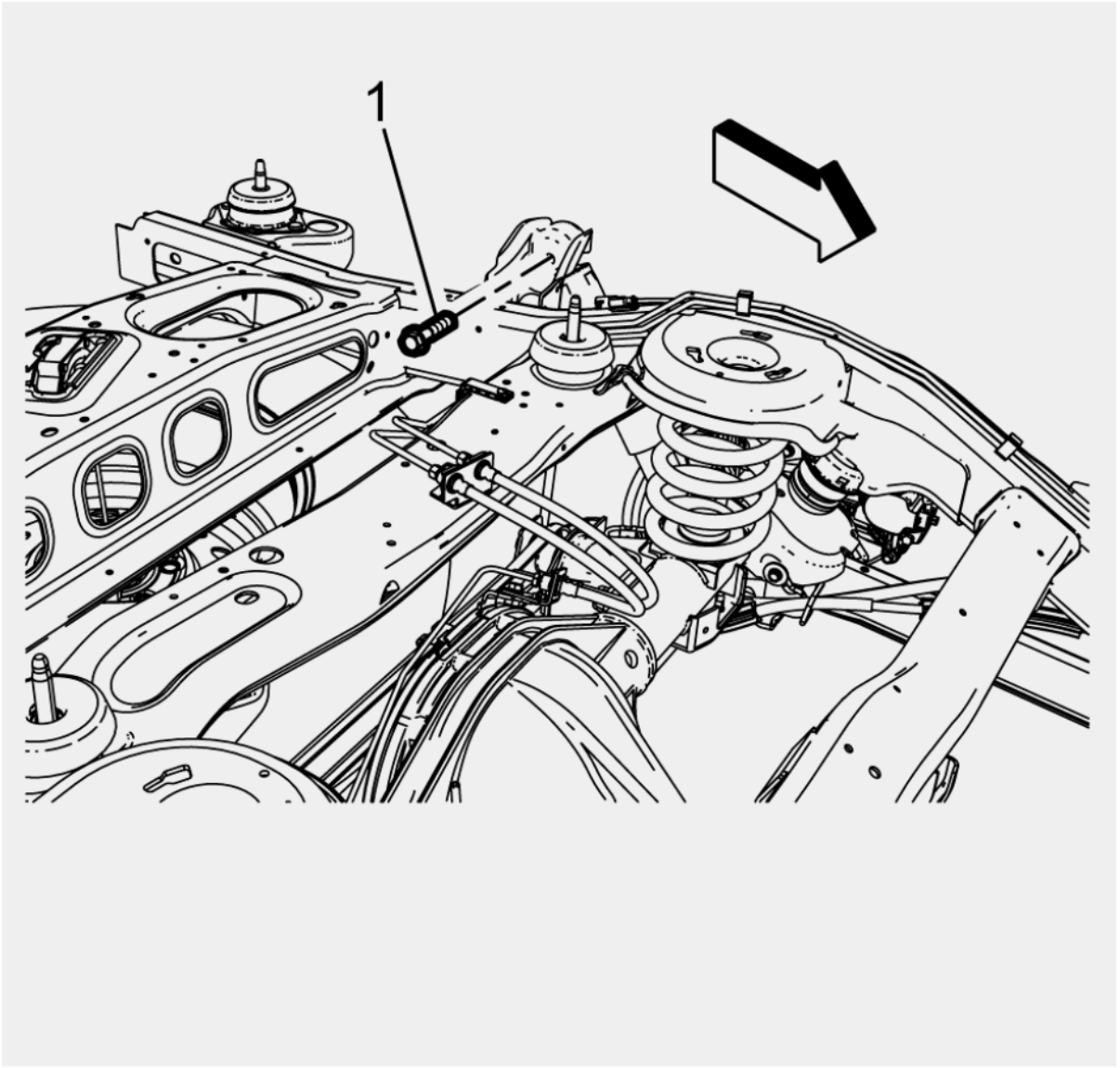

Fig. 7: Upper Shock Absorber Bolt
Courtesy of GENERAL MOTORS COMPANY

5. Remove the upper shock absorber bolt (1).

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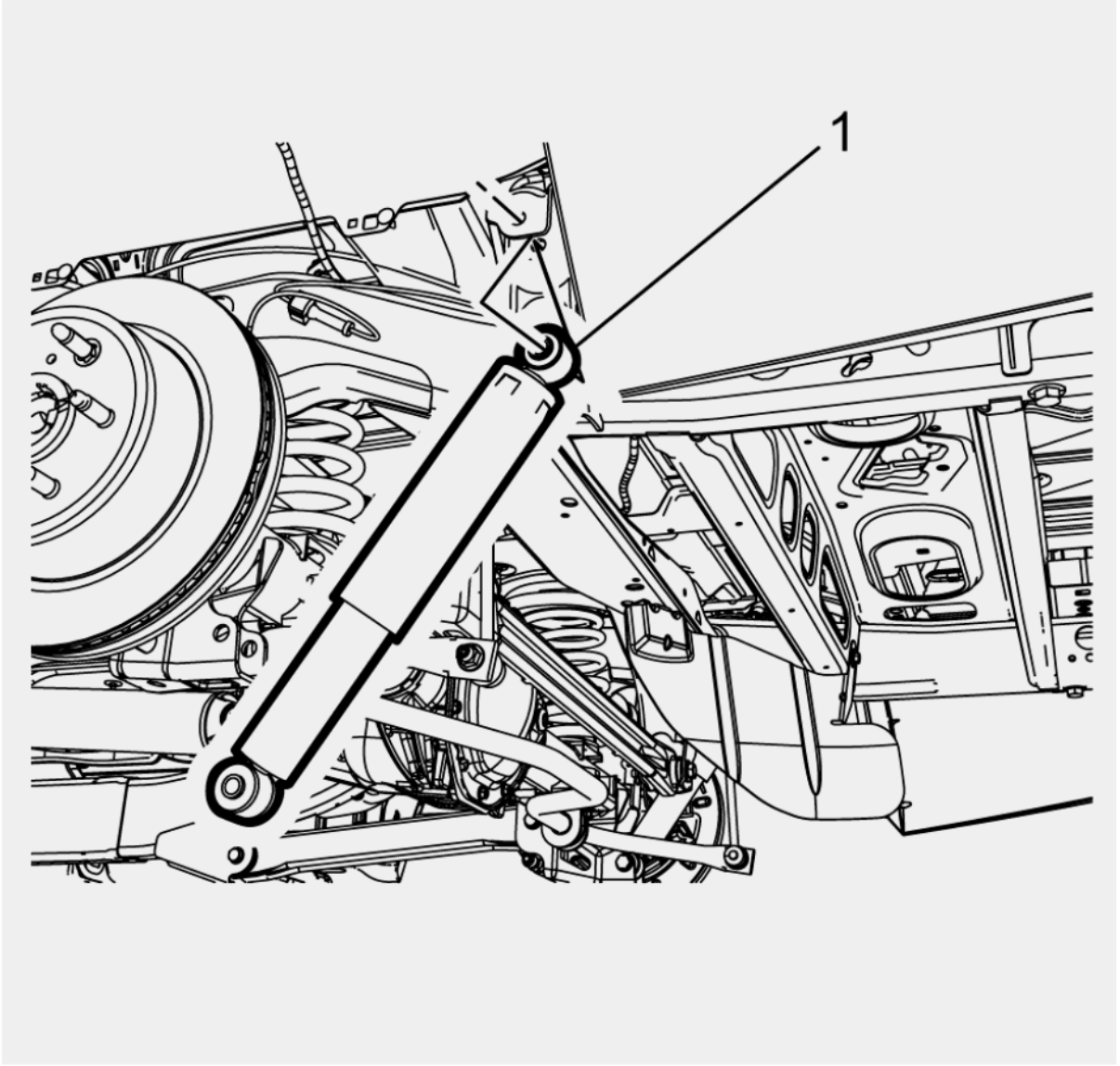

Fig. 8: Shock Absorber
Courtesy of GENERAL MOTORS COMPANY

6. Remove the shock absorber (1) from the vehicle.

Installation Procedure

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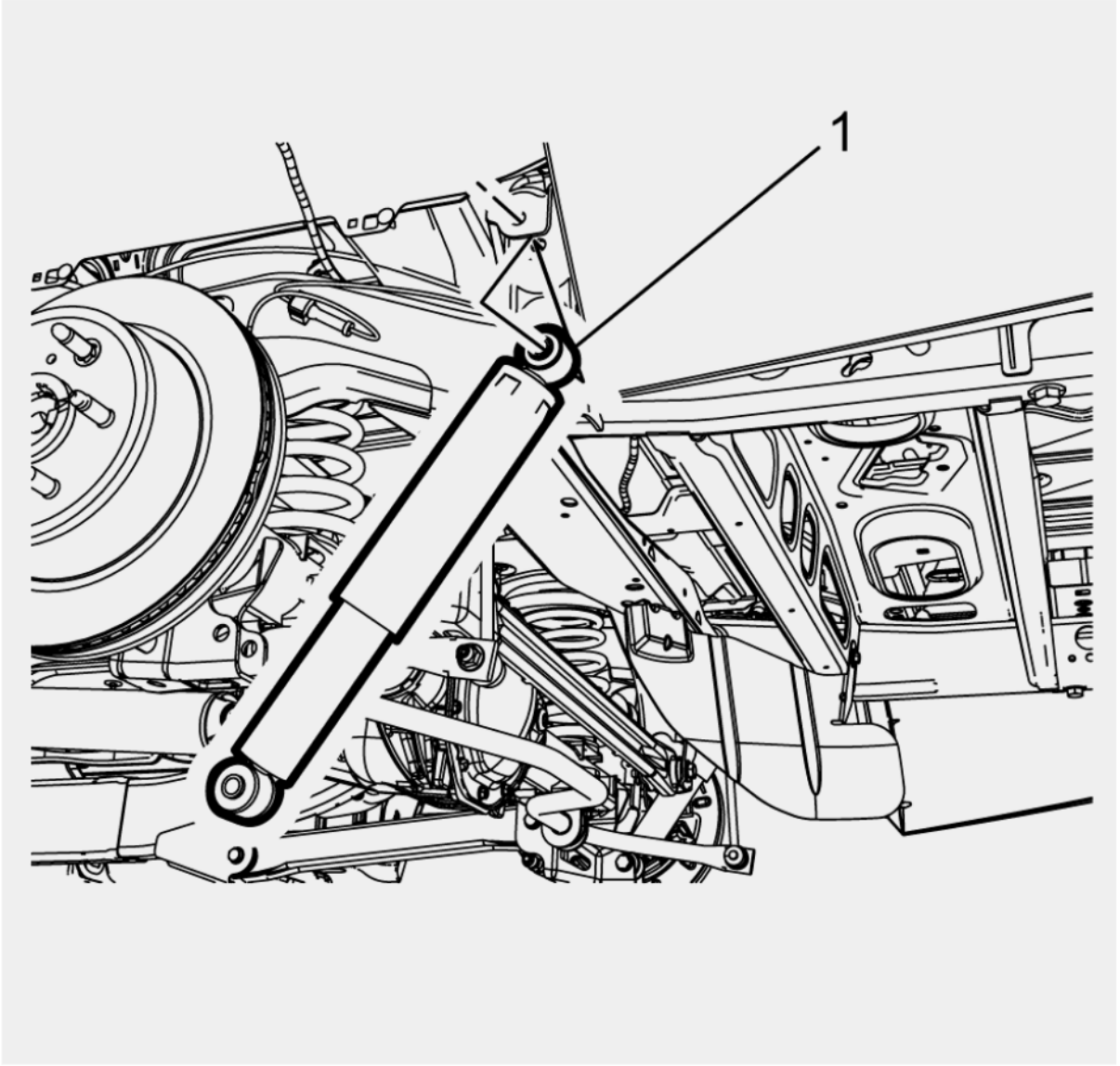

Fig. 9: Shock Absorber
Courtesy of GENERAL MOTORS COMPANY

1. Position the shock absorber (1) in the vehicle.

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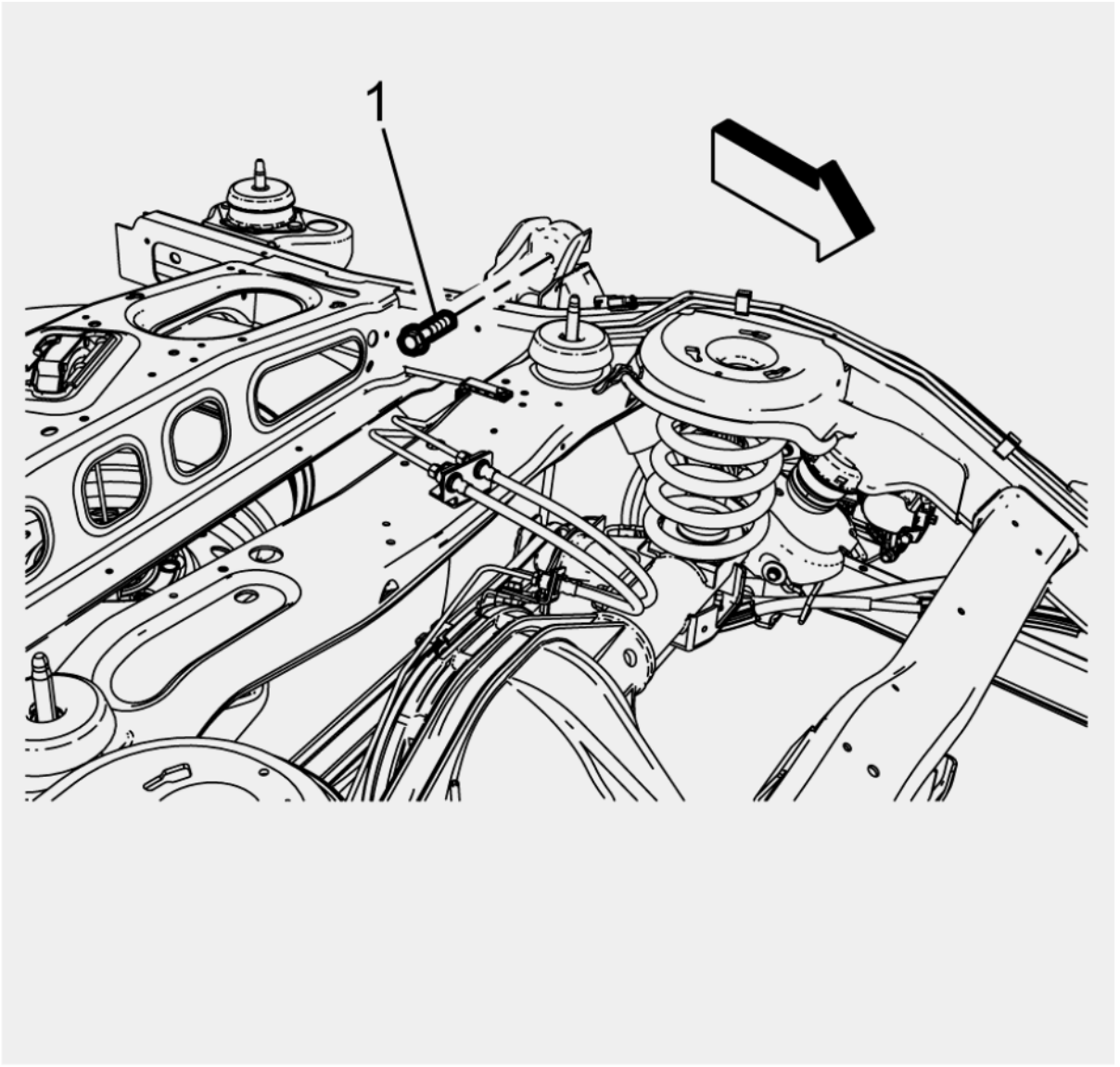

Fig. 10: Upper Shock Absorber Bolt
Courtesy of GENERAL MOTORS COMPANY

2. Install the upper shock absorber bolt (1).

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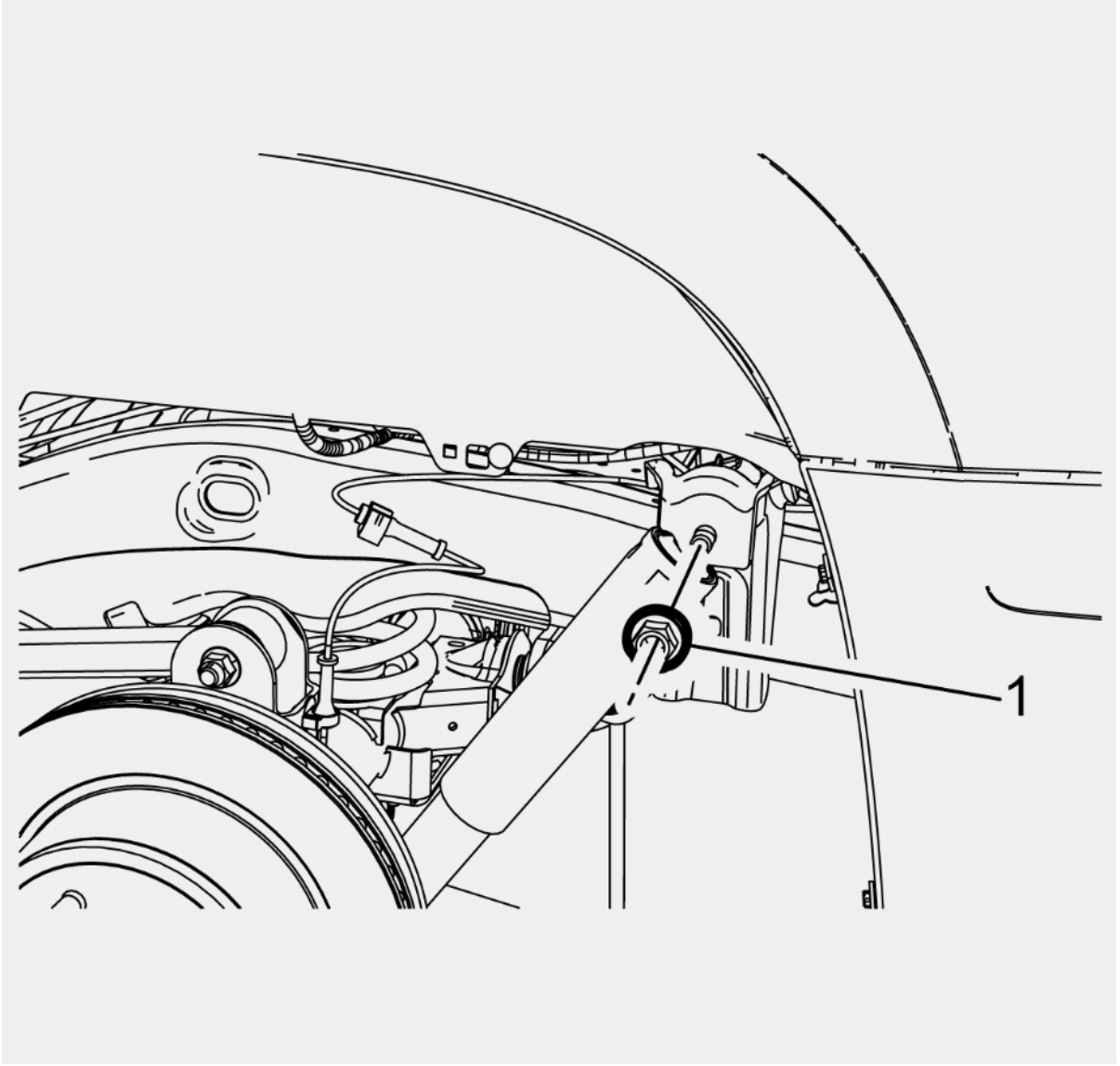

Fig. 11: Upper Shock Absorber Nut
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the upper shock absorber nut (1) and tighten to 115 N.m (85 lb ft).

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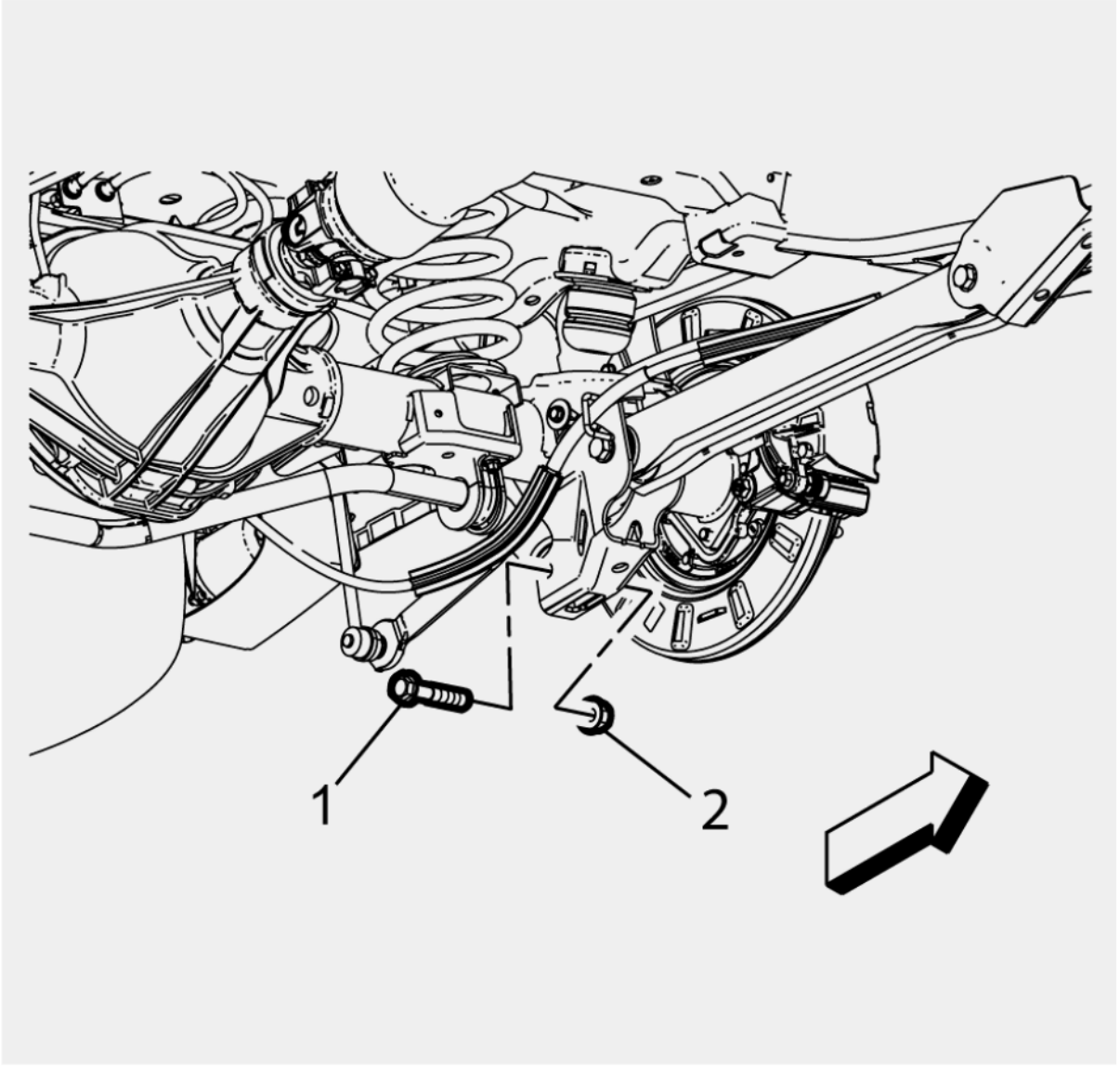

Fig. 12: Lower Shock Absorber Bolt And Nut
Courtesy of GENERAL MOTORS COMPANY

4. Install the lower shock absorber nut (2) and bolt (3), then tighten the bolt to 115 N.m (85 lb ft)
5. Remove the jack stand from the rear axle assembly.
6. Remove the support and lower the vehicle.

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SHOCK ABSORBER REPLACEMENT (HEAVY DUTY)

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle**
2. Support the rear axle assembly with the proper jack stand.

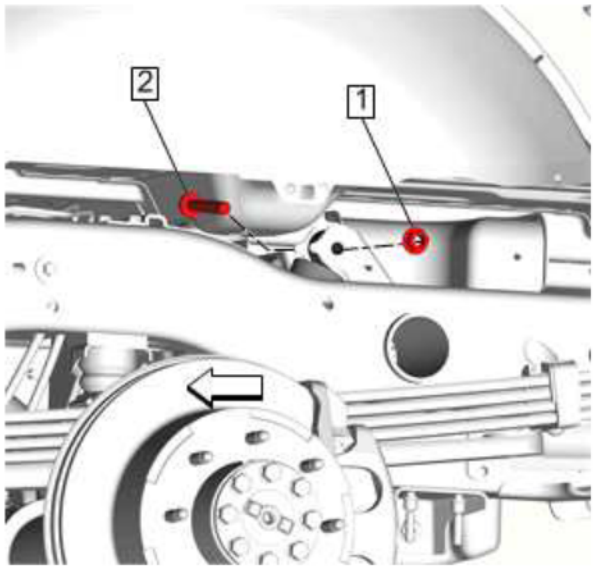

Fig. 13: Upper Shock Absorber Nut And Bolt
Courtesy of GENERAL MOTORS COMPANY

3. Remove the upper shock absorber nut (1) and bolt (2).

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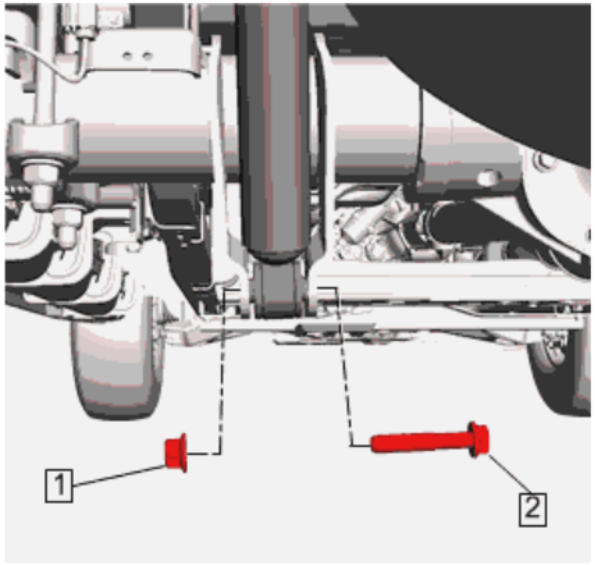

Fig. 14: Lower Shock Absorber Nut And Bolt
Courtesy of GENERAL MOTORS COMPANY

4. Remove the lower shock absorber nut (1) and bolt (2).

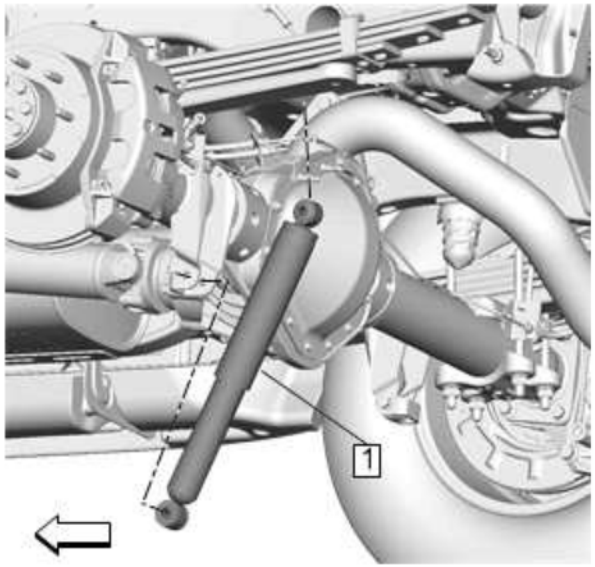

Fig. 15: Shock Absorber

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Courtesy of GENERAL MOTORS COMPANY

5. Remove the shock absorber (1) from the vehicle.

Installation Procedure

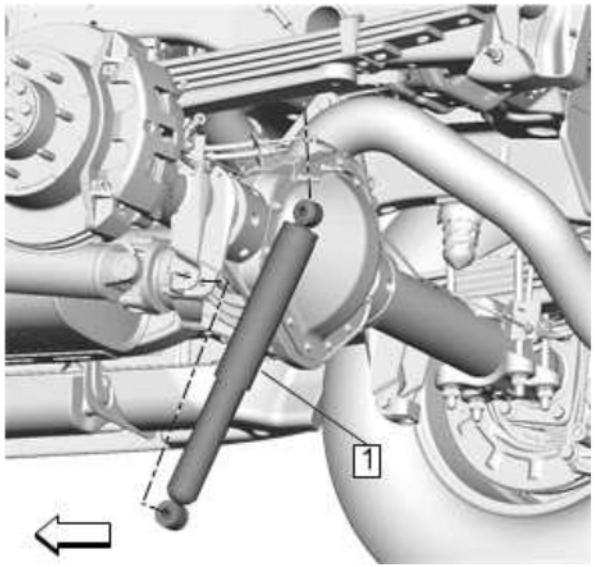

Fig. 16: Shock Absorber
Courtesy of GENERAL MOTORS COMPANY

1. Position the shock absorber (1) in the vehicle.

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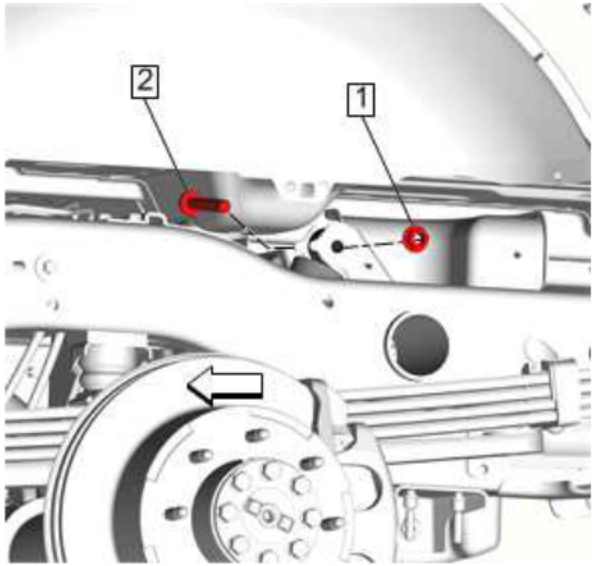

Fig. 17: Upper Shock Absorber Nut And Bolt
Courtesy of GENERAL MOTORS COMPANY

CAUTION: **Refer to Fastener Caution .**

2. Install the upper shock absorber bolt (2) and nut (1), then tighten the bolt to 115 N.m (85 lb ft).

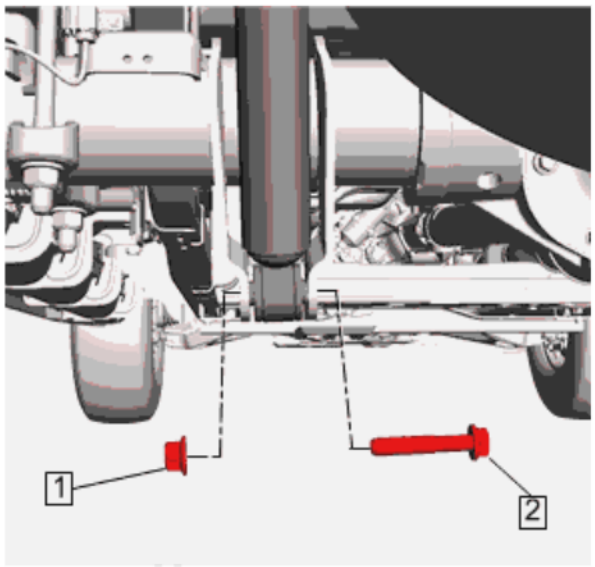

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Fig. 18: Lower Shock Absorber Nut And Bolt
Courtesy of GENERAL MOTORS COMPANY

3. Install the lower shock absorber bolt (2) and nut (1), then tighten the bolt to 115 N.m (85 lb ft)
4. Remove the jack stand from the rear axle assembly.
5. Remove the support and lower the vehicle.

REAR LEVELING SHOCK ABSORBER REPLACEMENT

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Support the rear axle assembly with the proper jack stand.

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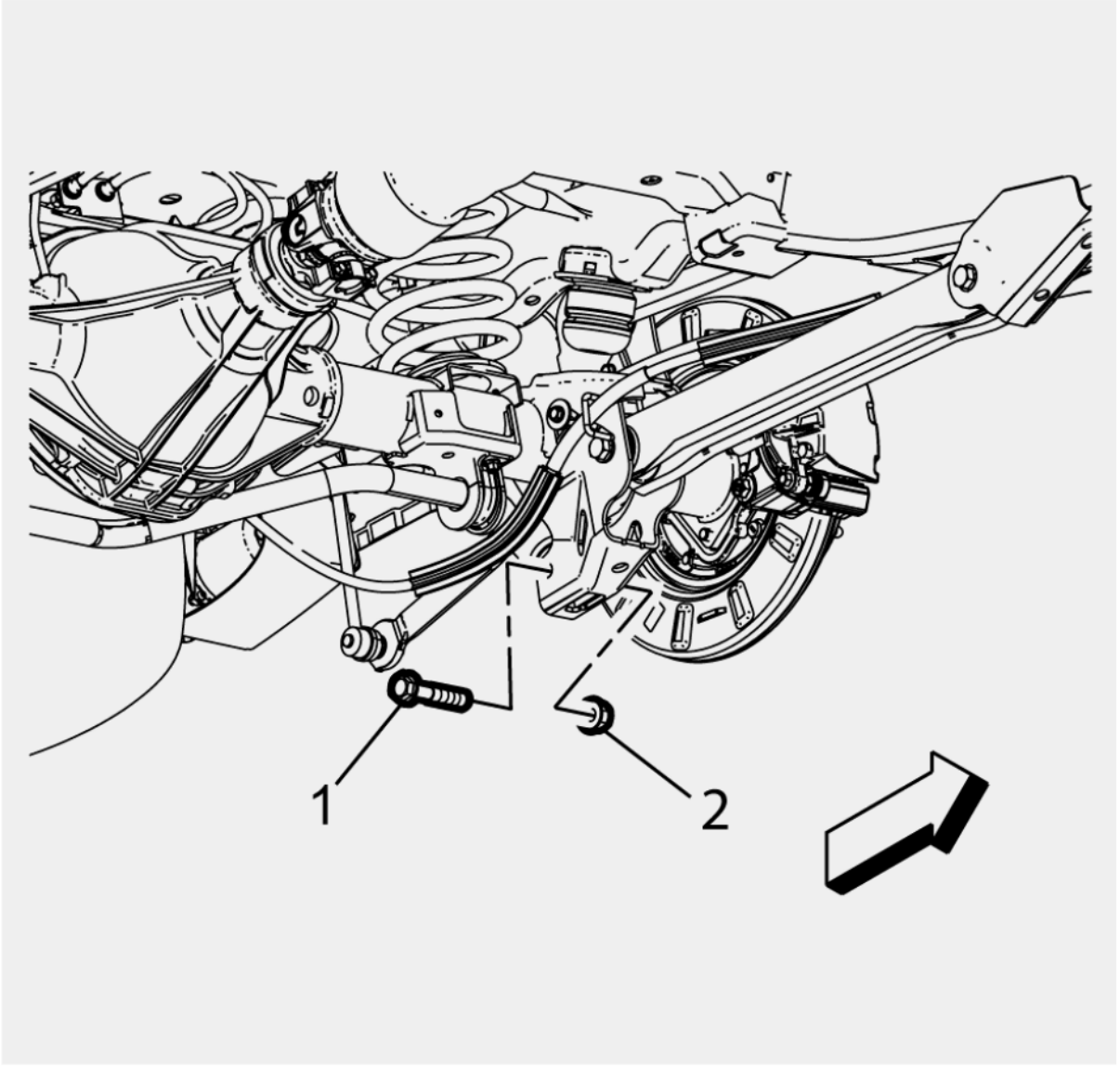

Fig. 19: Lower Shock Absorber Bolt And Nut
Courtesy of GENERAL MOTORS COMPANY

3. Remove the lower shock absorber bolt (1) and nut (2).

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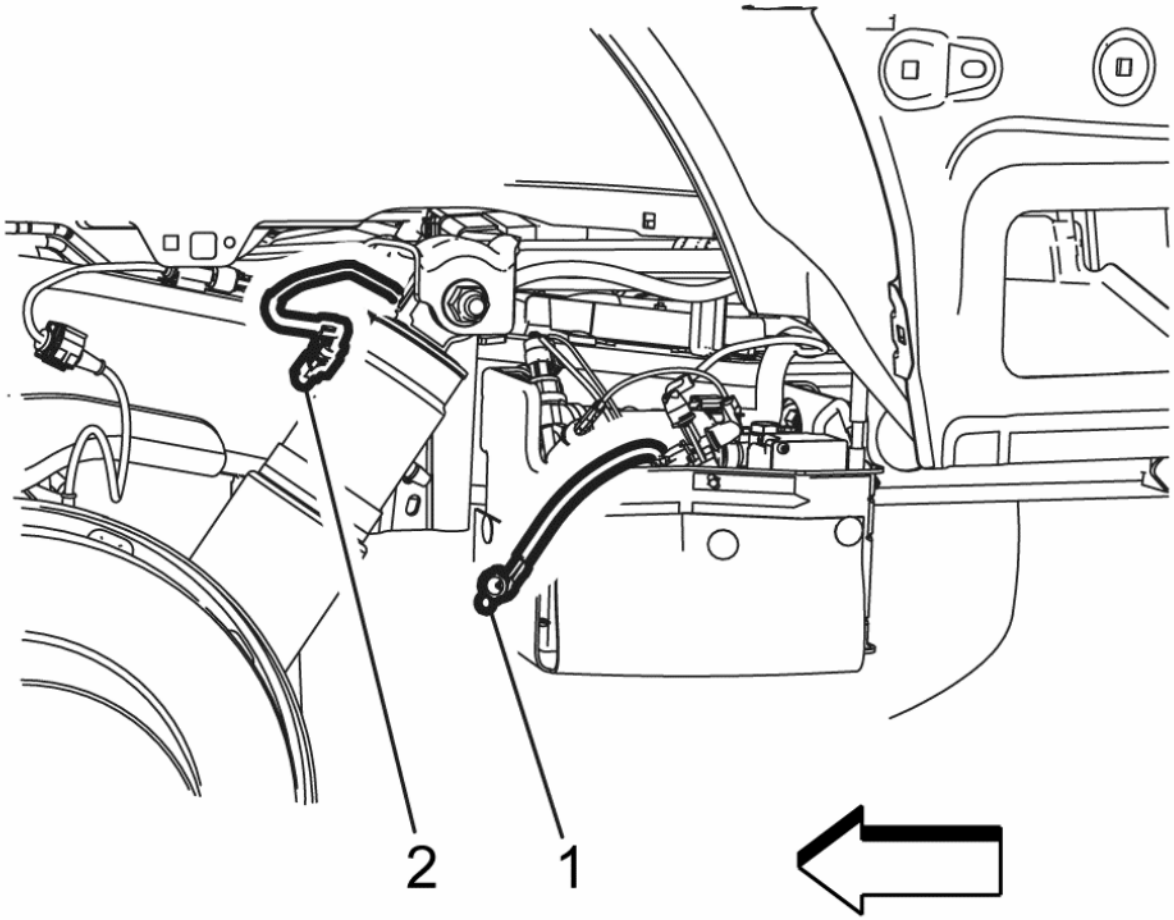

Fig. 20: Electronic Suspension Control Connector
Courtesy of GENERAL MOTORS COMPANY

4. Disconnect the electronic suspension control connector (2) and the air leveler hose fitting (1).

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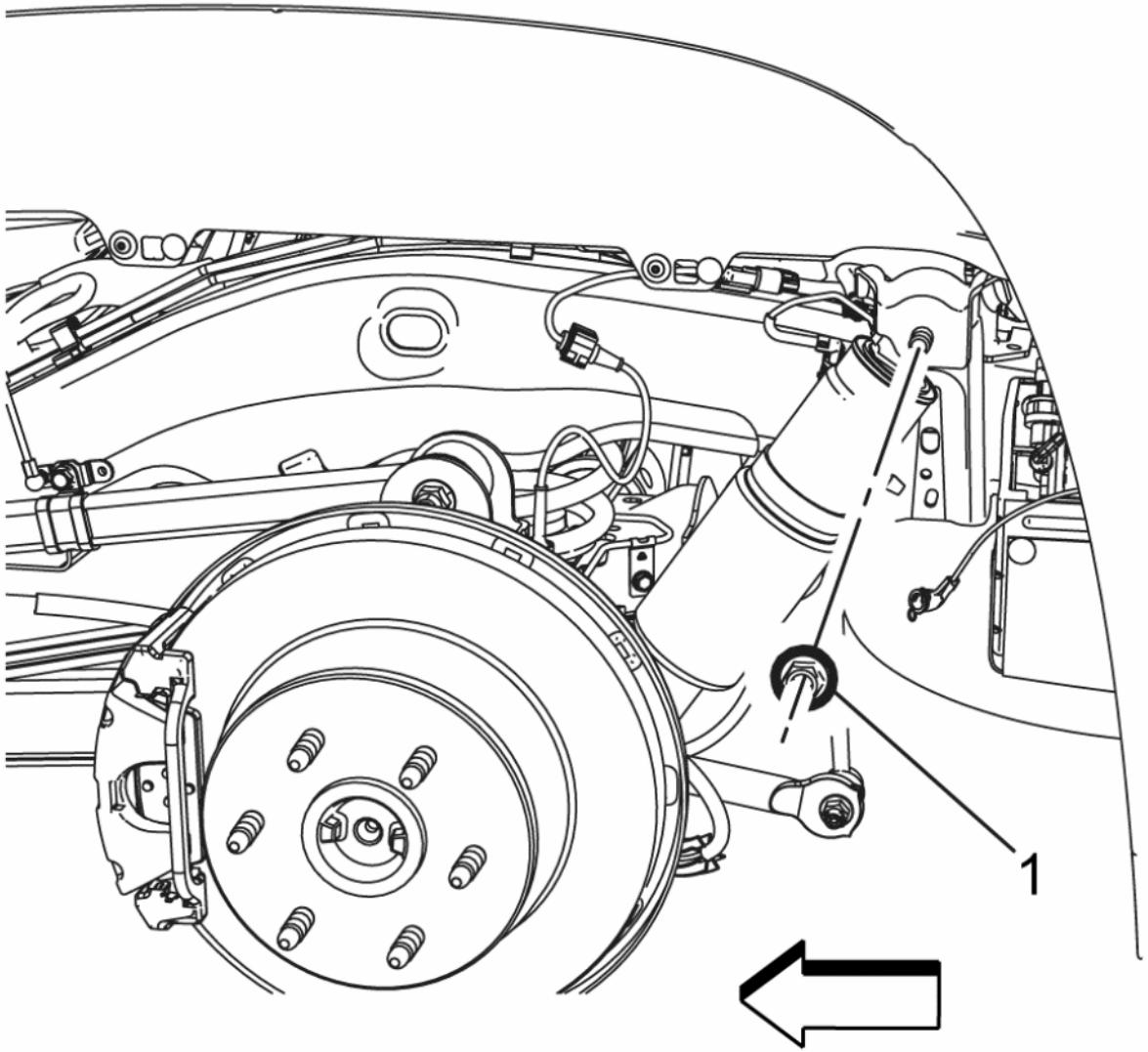

Fig. 21: Upper Shock Absorber Nut
Courtesy of GENERAL MOTORS COMPANY

5. Remove the upper shock absorber nut (1).

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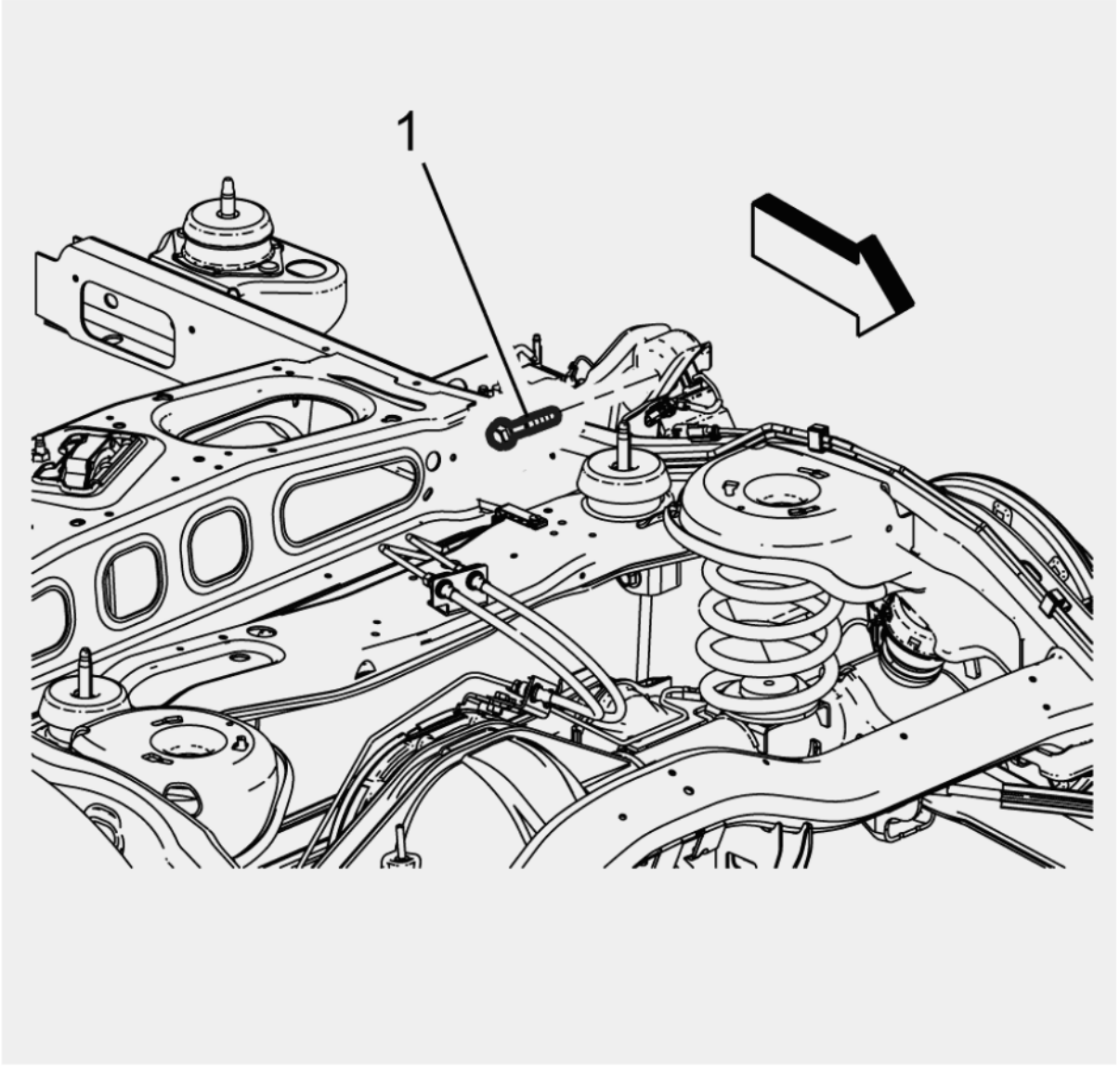

Fig. 22: Upper Shock Absorber Bolt
Courtesy of GENERAL MOTORS COMPANY

6. Remove the upper shock absorber bolt (1).

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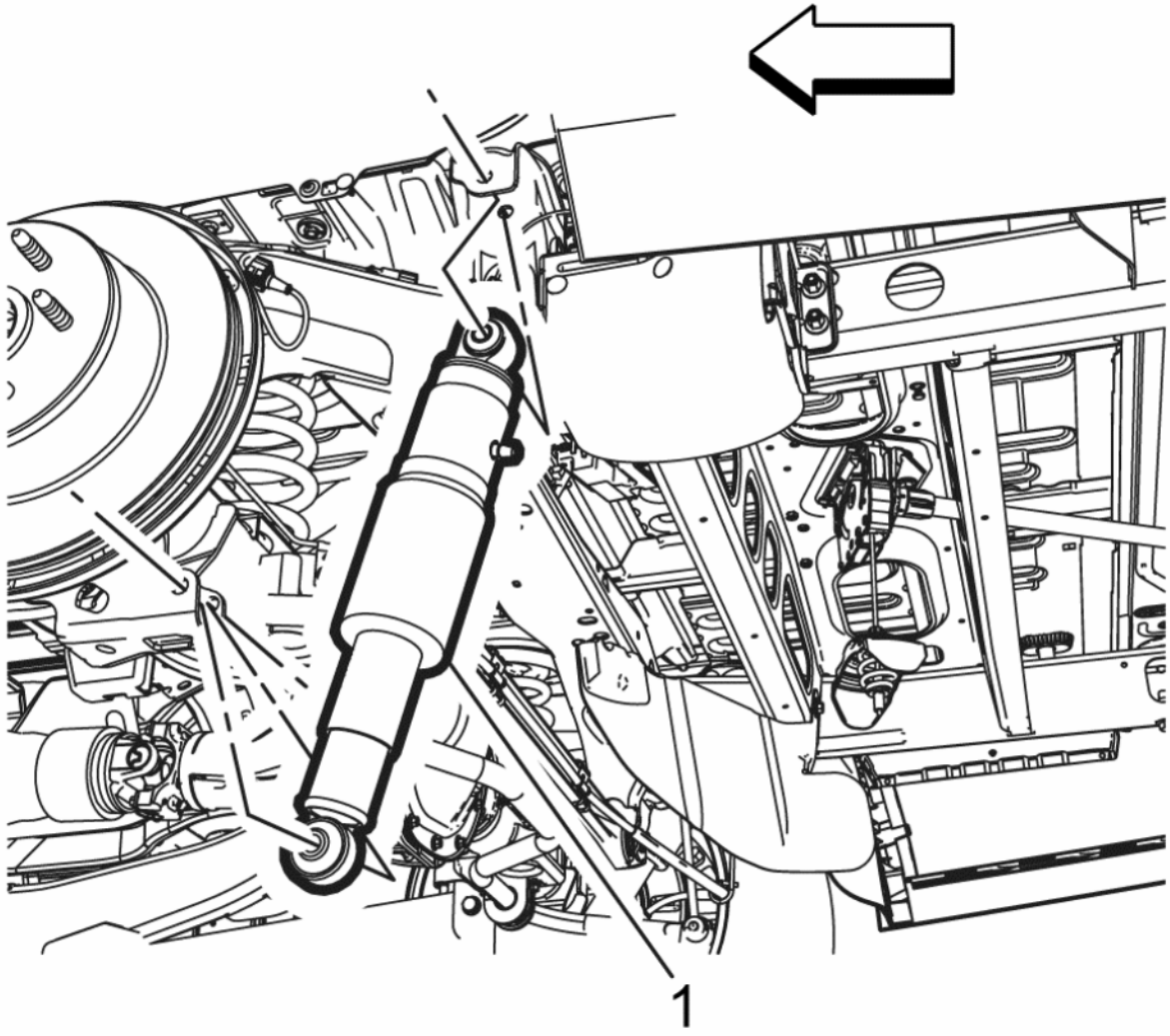

Fig. 23: Shock Absorber
Courtesy of GENERAL MOTORS COMPANY

7. Remove the shock absorber (1) from the vehicle.

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Installation Procedure

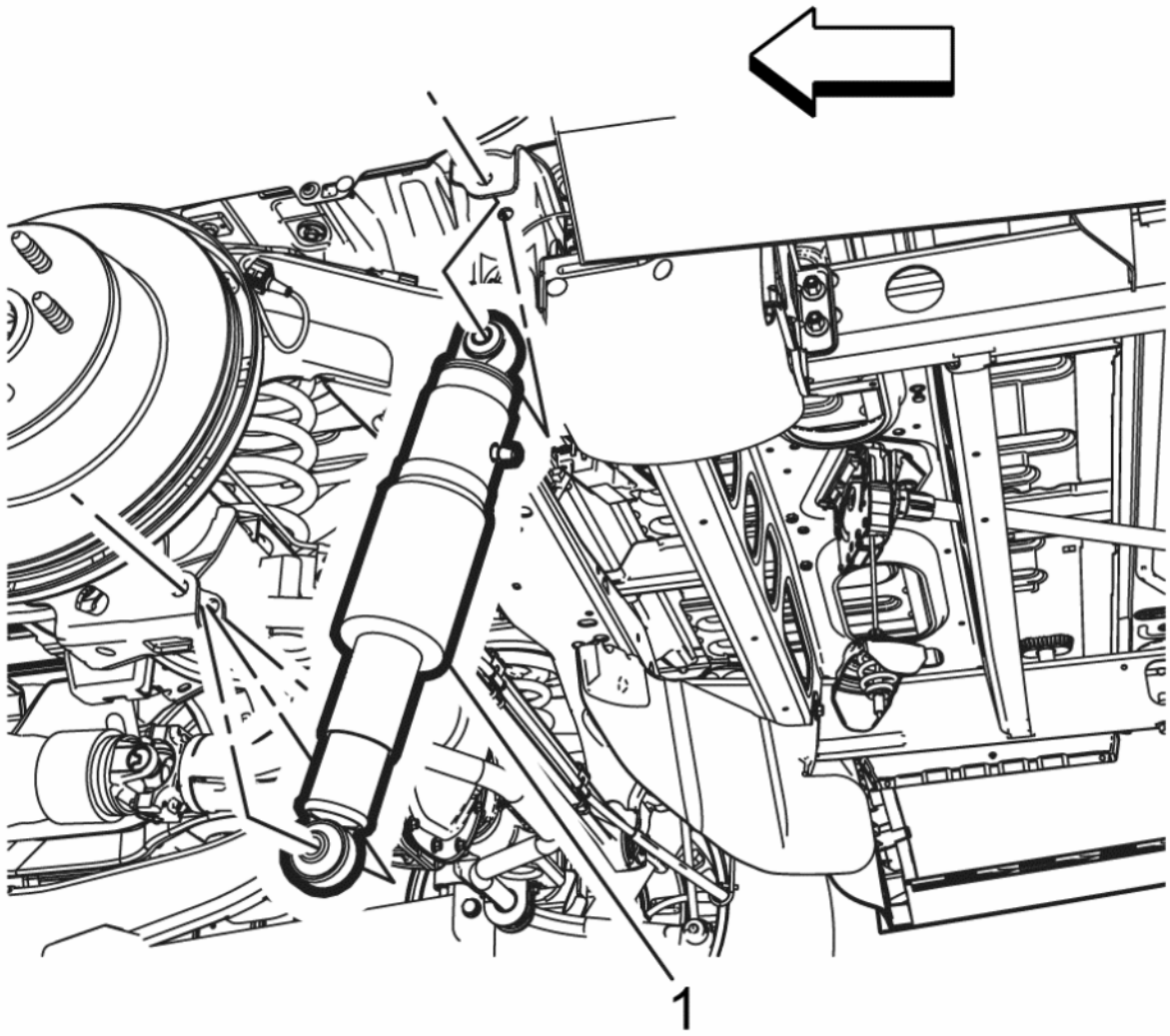

Fig. 24: Shock Absorber
Courtesy of GENERAL MOTORS COMPANY

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1. Position the shock absorber (1) in the vehicle.

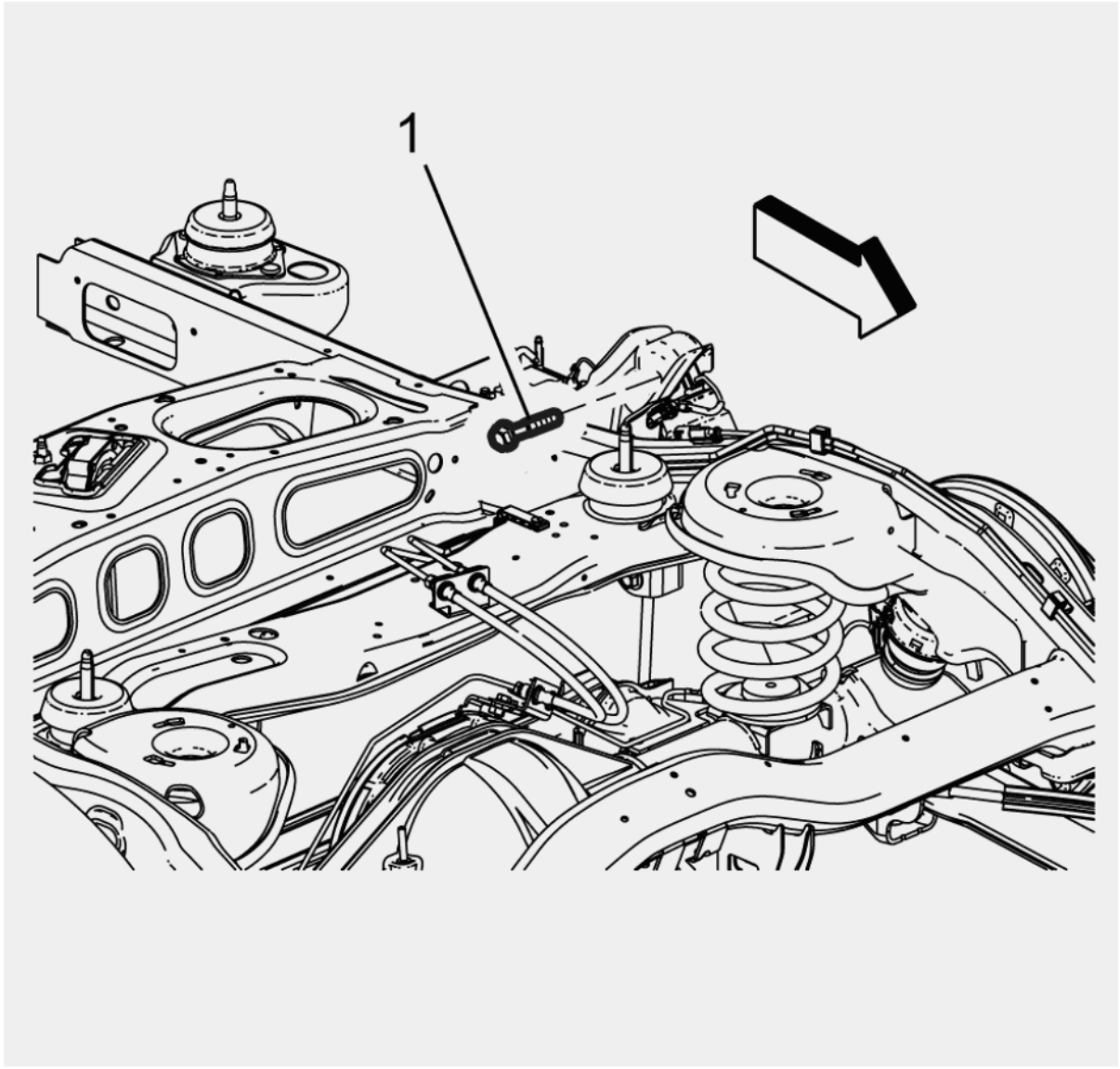

Fig. 25: Upper Shock Absorber Bolt
Courtesy of GENERAL MOTORS COMPANY

2. Install the upper shock absorber bolt (1).

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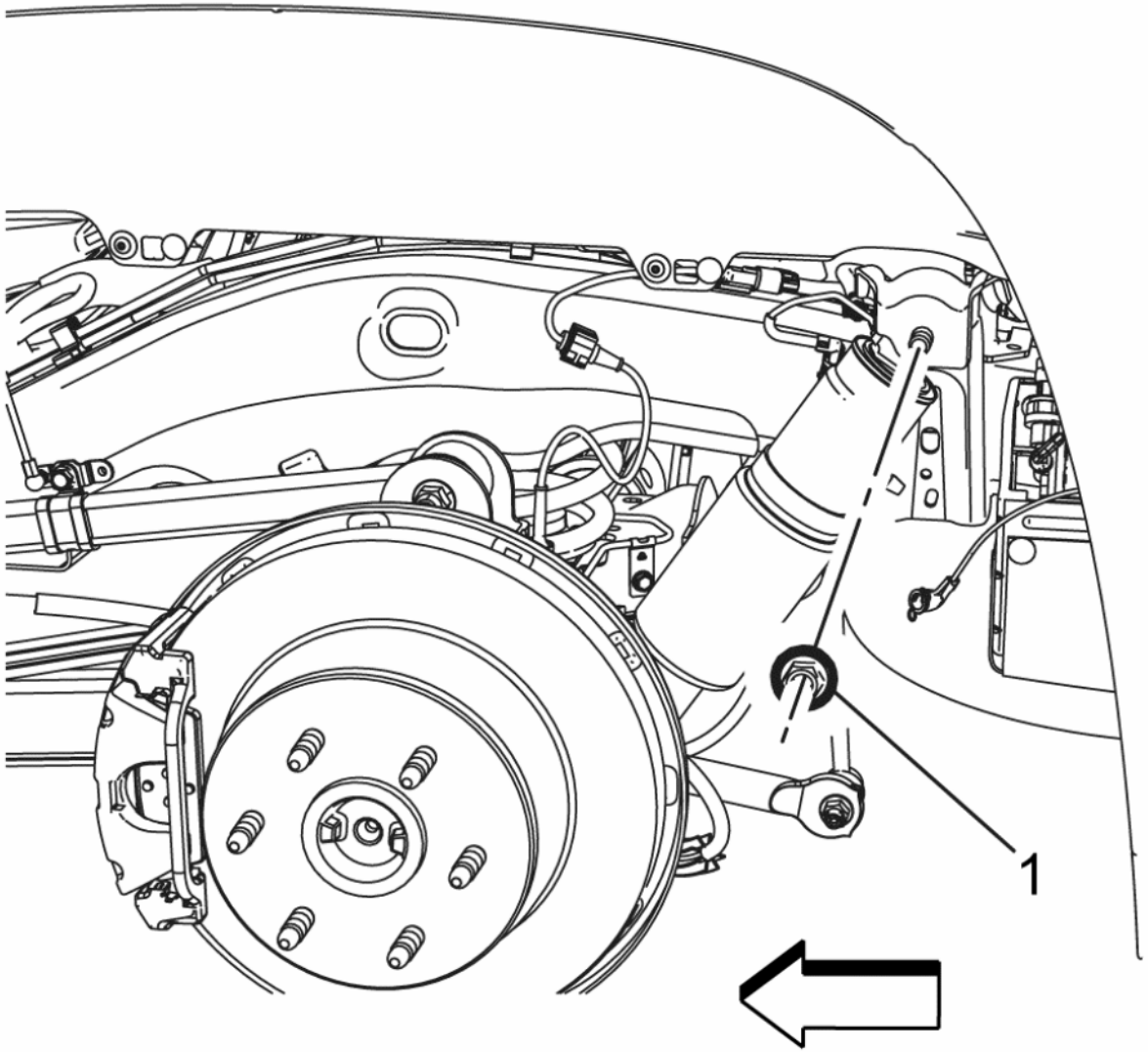

Fig. 26: Upper Shock Absorber Nut
Courtesy of GENERAL MOTORS COMPANY

CAUTION: Refer to Fastener Caution .

3. Install the upper shock absorber nut (1) and tighten to 115 N.m (85 lb ft).

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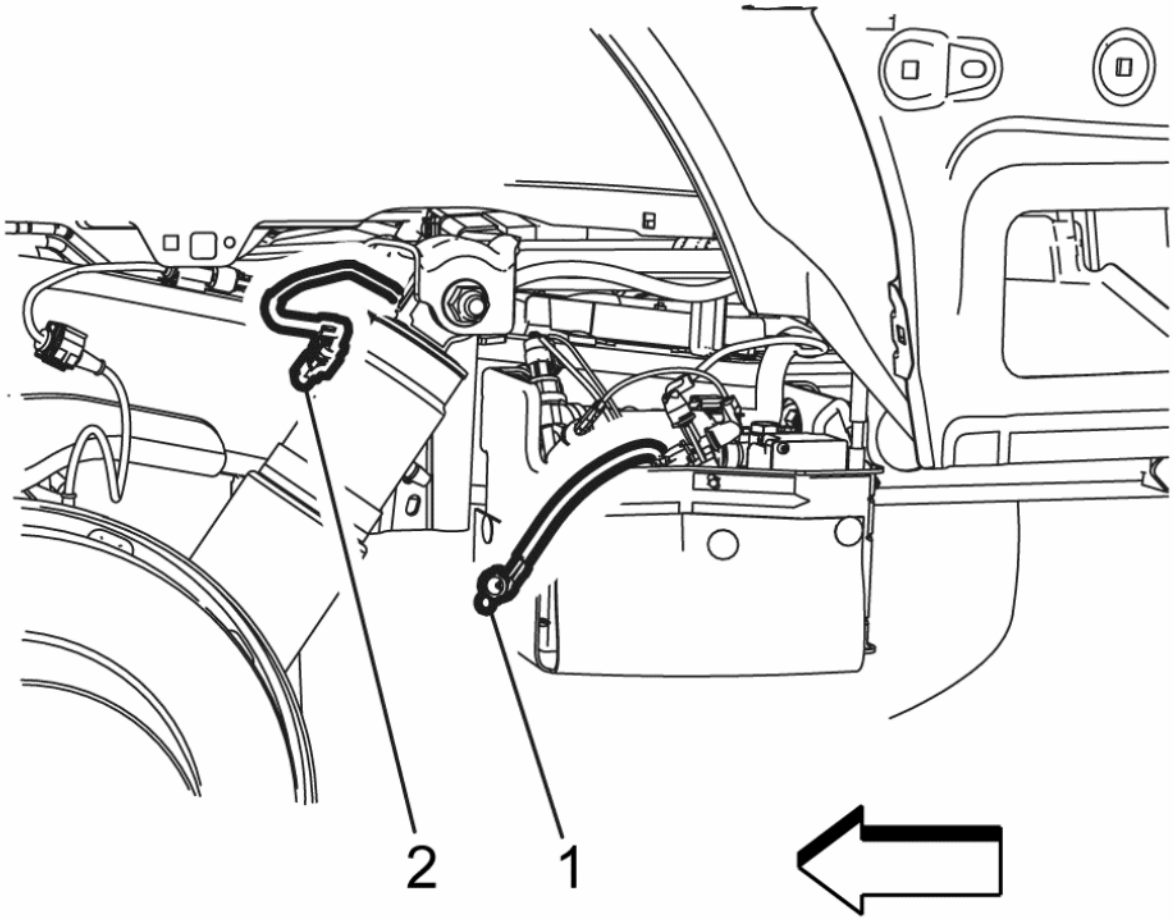

Fig. 27: Electronic Suspension Control Connector
Courtesy of GENERAL MOTORS COMPANY

4. Connect the electronic suspension control connector (2) and the air leveler hose fitting (1).

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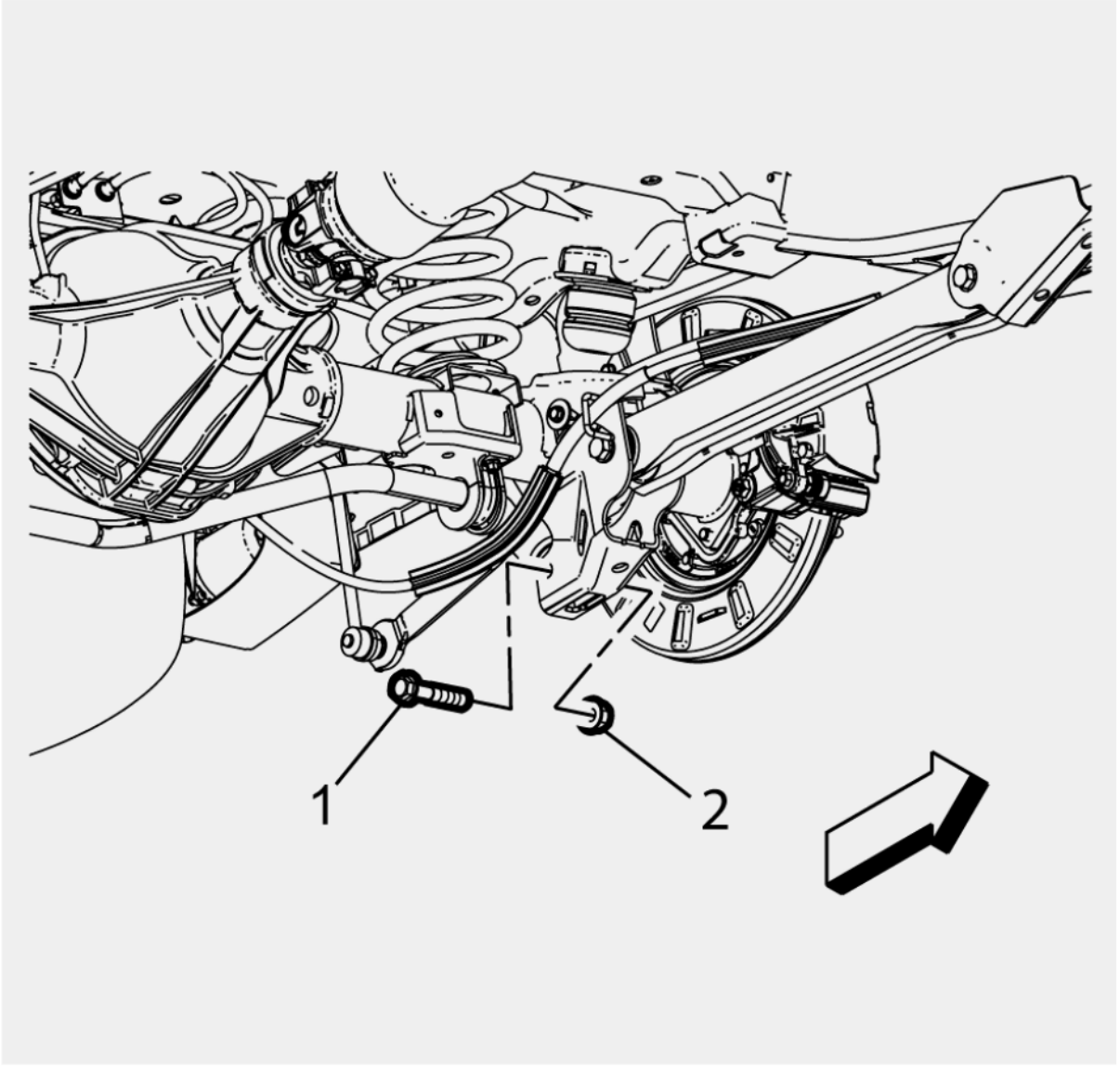

Fig. 28: Lower Shock Absorber Bolt And Nut
Courtesy of GENERAL MOTORS COMPANY

5. Install the lower shock absorber nut (2) and bolt (3), then tighten the bolt to 115 N.m (85 lb ft)
6. Remove the jack stand from the rear axle assembly.
7. Remove the support and lower the vehicle.

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REAR COIL SPRING REPLACEMENT

Removal Procedure

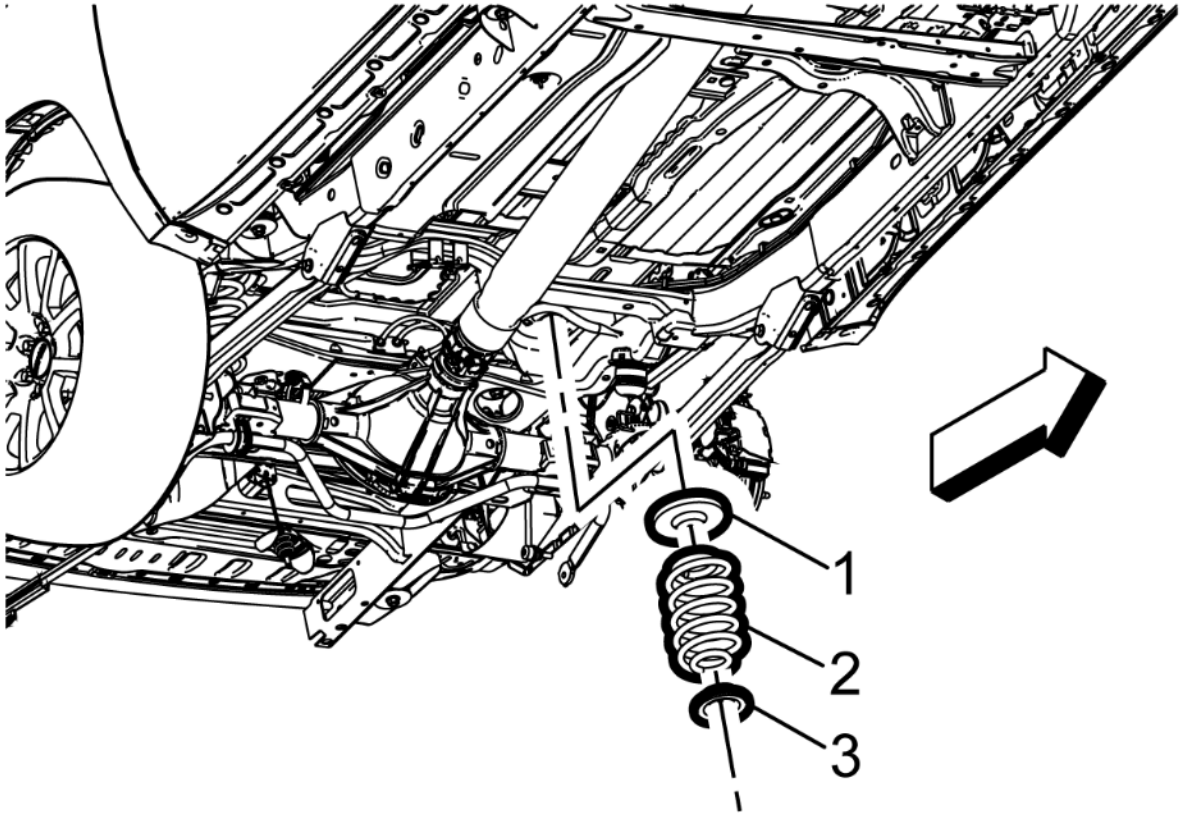

Fig. 29: Coil Spring, Upper Spring Insulator And Lower Spring Insulator
Courtesy of GENERAL MOTORS COMPANY

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1. Refer to **Lifting and Jacking the Vehicle** .
2. Support the rear axle.
3. Remove the stabilizer shaft link retaining nut from the frame. Refer to **Stabilizer Shaft Link Replacement**.
4. Remove the rear brake hose bracket bolt at the rear axle. Refer to **Rear Brake Hose Replacement (JD9 to Rear Axle)** **Rear Brake Hose Replacement (J95 to Rear Axle)** .
5. Remove the lower shock absorber nut and bolt from the rear axle. Refer to **Shock Absorber Replacement (Z56, Z71, ZW7)** **Shock Absorber Replacement (Heavy Duty)**.
6. Lower the rear axle until the coil spring (2) is fully unloaded. After removing the spring inspect upper spring insulator (1) and the lower spring insulator (3).

   IMPORTANT: Note the orientation of the spring as they are directional.

7. Remove the coil spring and the upper insulator.

Installation Procedure

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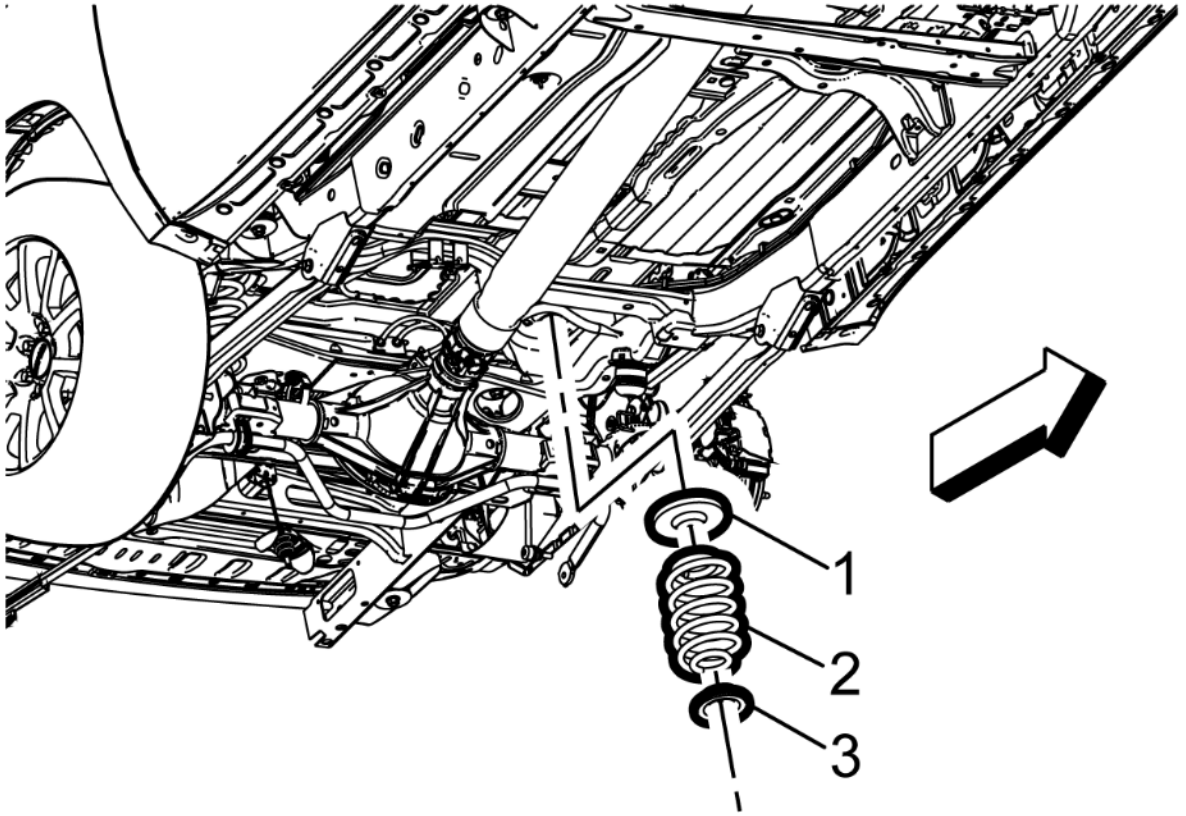

Fig. 30: Coil Spring, Upper Spring Insulator And Lower Spring Insulator
Courtesy of GENERAL MOTORS COMPANY

1. Install the coil spring (2) and the upper insulator (1) and the lower spring insulator (3).
2. Raise the rear axle.
3. Install the lower shock absorber retaining nut and bolt to the rear axle. Refer to **Shock Absorber Replacement (Z56, Z71, ZW7)Shock**

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Absorber Replacement (Heavy Duty).

4. Install the rear brake hose bracket bolt at the rear axle. Refer to **Rear Brake Hose Replacement (JD9 to Rear Axle)** **Rear Brake Hose Replacement (J95 to Rear Axle)** .
5. Install the stabilizer shaft link to the frame. Refer to **Stabilizer Shaft Link Replacement**.
6. Remove the rear axle support.
7. Lower the vehicle.

JOUNCE BUMPER REPLACEMENT

Removal Procedure

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

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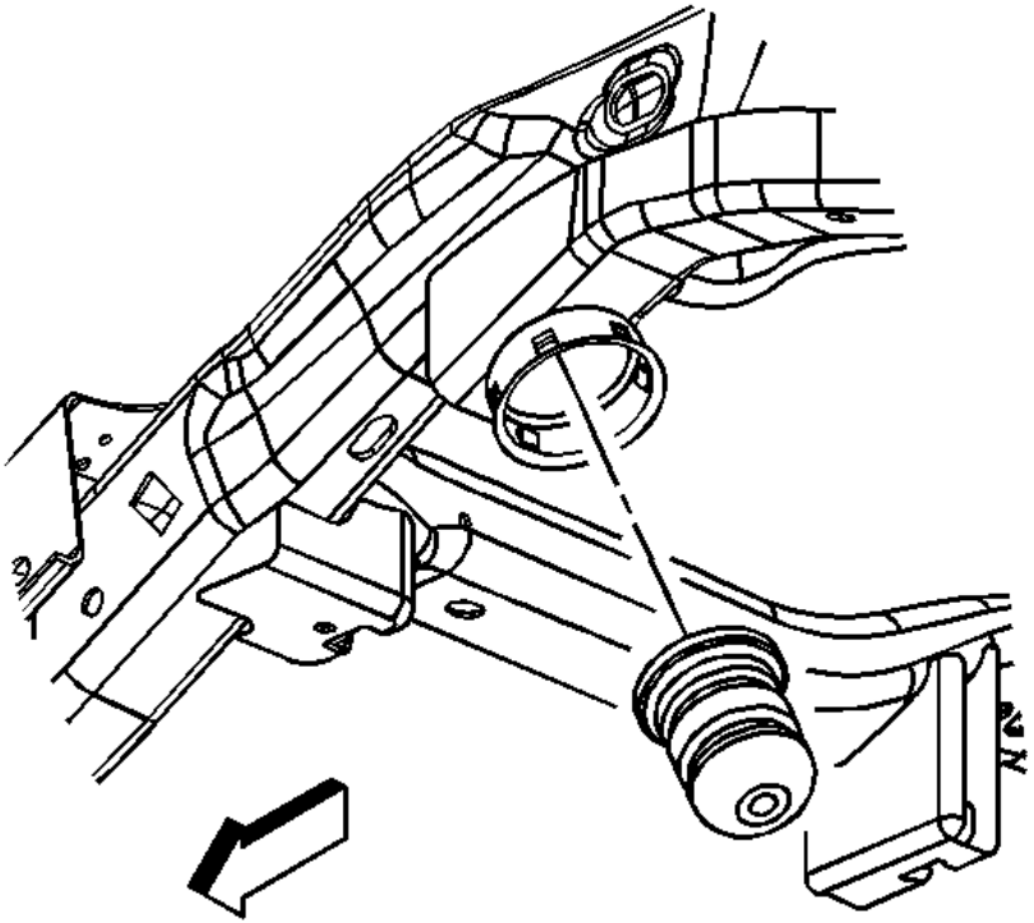

Fig. 31: Jounce Bumper
Courtesy of GENERAL MOTORS COMPANY

2. The jounce bumper is a snap fit design. Remove the jounce bumper from the bracket.

Installation Procedure

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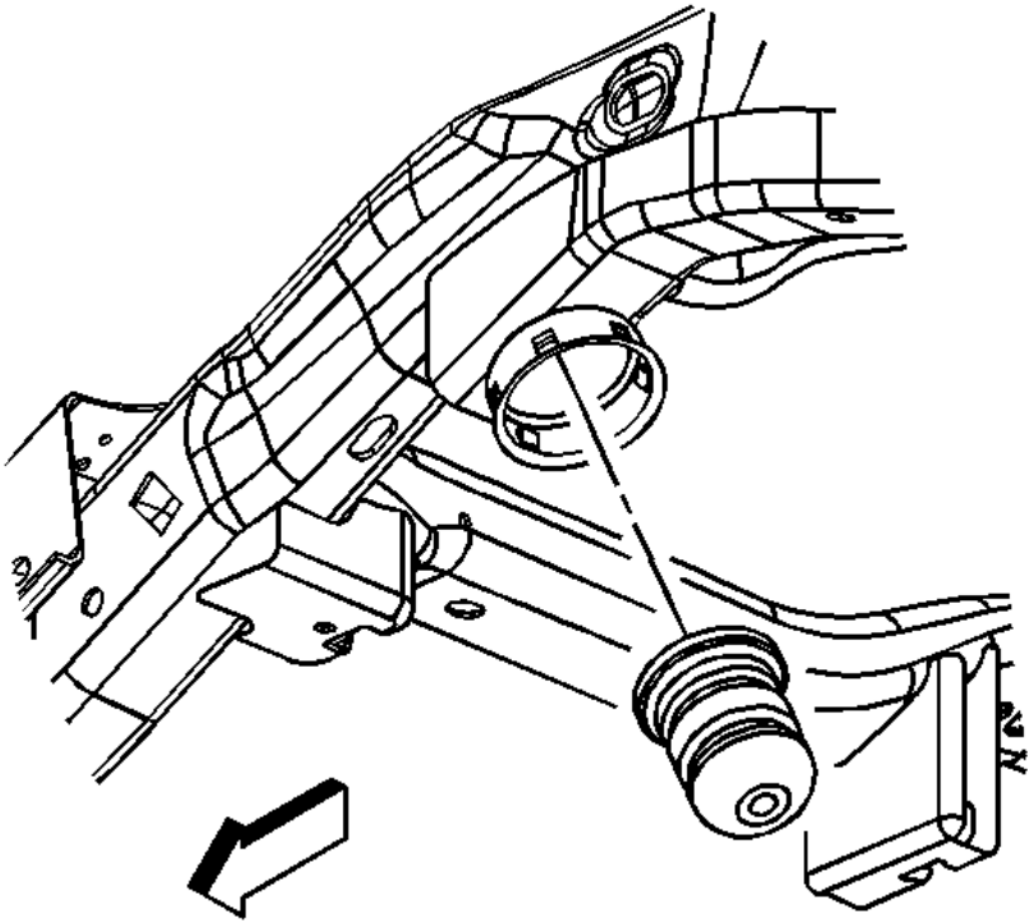

Fig. 32: Jounce Bumper
Courtesy of GENERAL MOTORS COMPANY

1. Position the jounce bumper to the bracket.
2. Press the jounce bumper into the bracket until fully seated.
3. Lower the vehicle.

REAR LEAF SPRING REPLACEMENT (HEAVY DUTY)

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Removal Procedure

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

NOTE: **Support the axle independently from the vehicle.**

2. Support the rear axle to relieve the tension on the leaf springs.
3. Remove the front fuel tank assembly, if equipped. Refer to **Fuel Tank Replacement (Front Tank)**

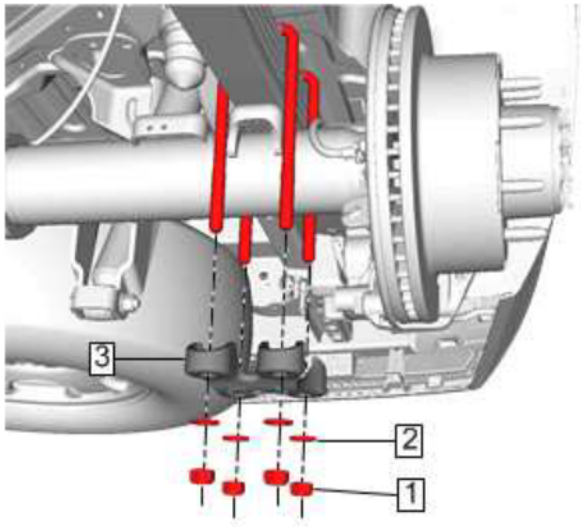

Fig. 33: Rear Spring U-Bolt Nuts, Washers And Anchor Plate
Courtesy of GENERAL MOTORS COMPANY

4. Remove and DISCARD the rear spring U-bolt nuts (1) and the washers (2). Replace with NEW only.
5. Remove the rear spring anchor plate (3).

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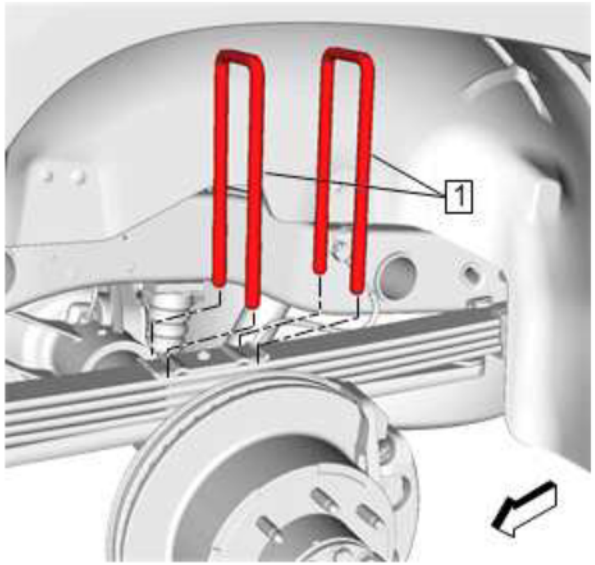

Fig. 34: Rear Spring U-Bolts
Courtesy of GENERAL MOTORS COMPANY

6. Remove and DISCARD the rear spring U-bolts (1). Replace with NEW only.

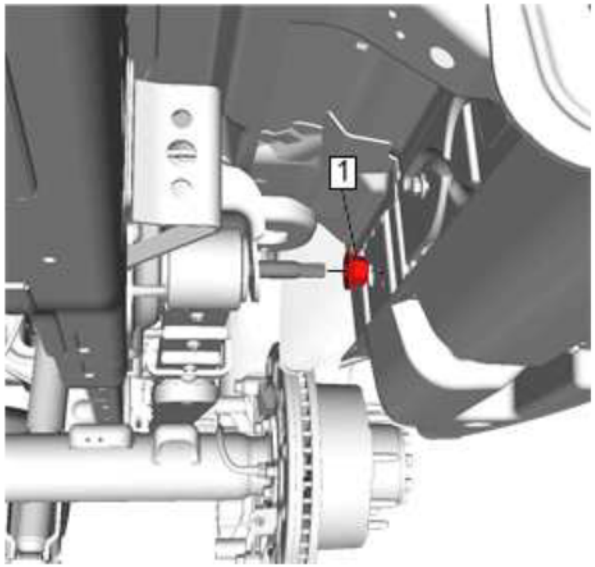

Fig. 35: Rear Spring Front Nut

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Courtesy of GENERAL MOTORS COMPANY

7. Remove the rear spring front nut (1).

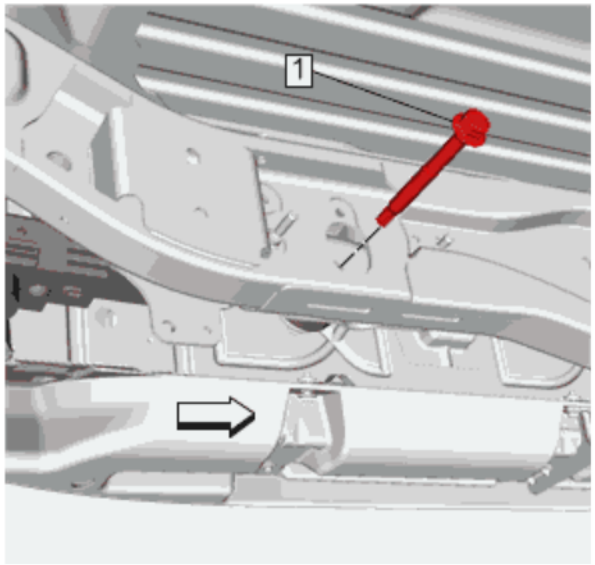

Fig. 36: Rear Spring Front Bolt
Courtesy of GENERAL MOTORS COMPANY

8. Remove the rear spring front bolt.

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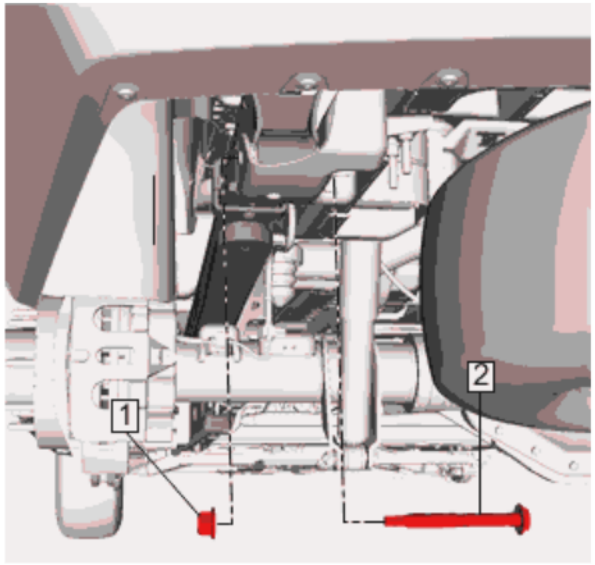

Fig. 37: Rear Shackle Nut And Bolt
Courtesy of GENERAL MOTORS COMPANY

9. Remove the rear shackle nut and bolt from the frame.

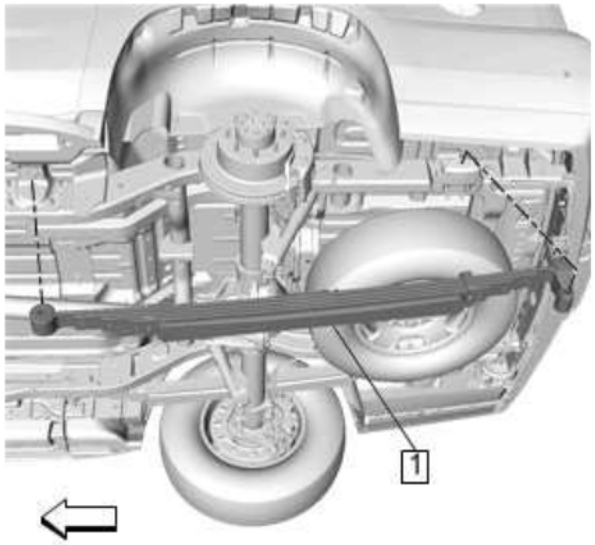

Fig. 38: Leaf Spring Assembly

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Courtesy of GENERAL MOTORS COMPANY

10. With the aide of an assistant, remove the leaf spring assembly (1) from the vehicle.
11. Remove the rear leaf spring shackle, if needed. Refer to **Rear Spring Shackle Replacement (Heavy Duty)**

Installation Procedure

NOTE: **Do NOT tighten the rear shackle to specifications, leave loose.**

1. Install the rear leaf spring shackle, if needed. Refer to **Rear Spring Shackle Replacement (Heavy Duty)**

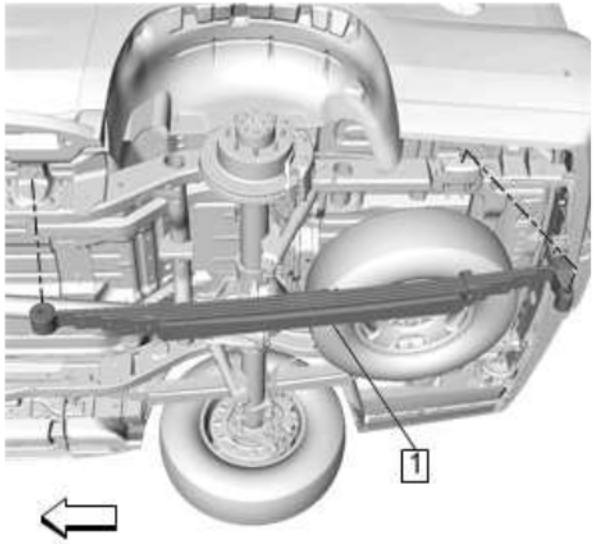

Fig. 39: Leaf Spring Assembly
Courtesy of GENERAL MOTORS COMPANY

2. With the aide of an assistant, position the rear leaf spring (1) in the vehicle.

NOTE: **Do NOT tighten the rear spring front bolt or the rear shackle nut and bolt. Leave the bolts lose to allow the rear spring assembly to move.**

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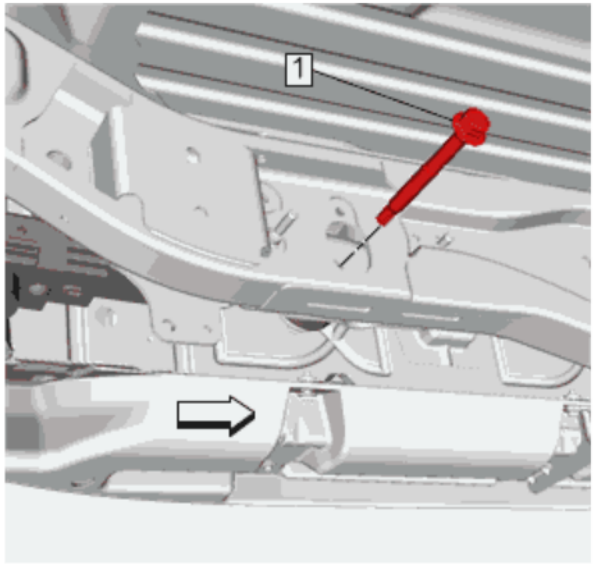

Fig. 40: Rear Spring Front Bolt
Courtesy of GENERAL MOTORS COMPANY

3. Install the rear spring front bolt (1).

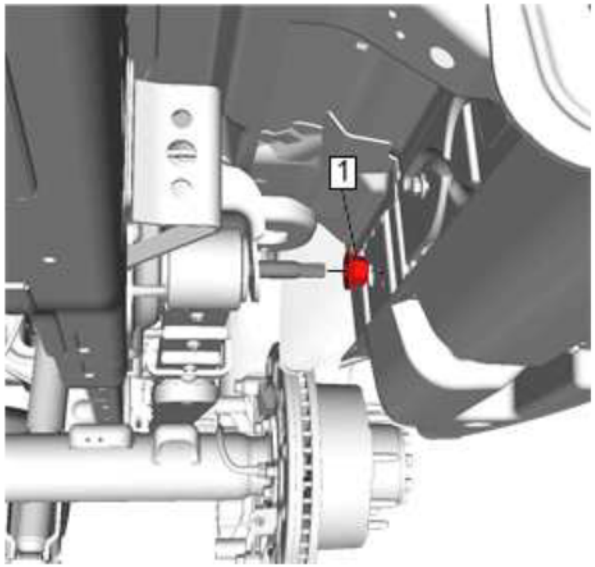

Fig. 41: Rear Spring Front Nut

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Courtesy of GENERAL MOTORS COMPANY

4. Install the rear spring shackle nut (1).

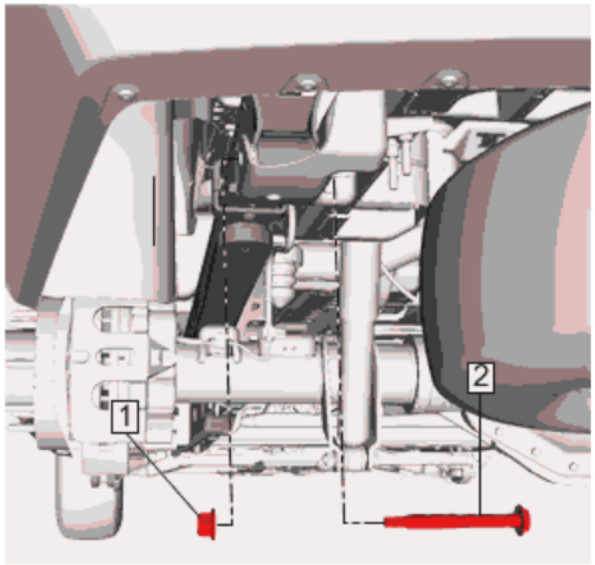

Fig. 42: Rear Shackle Nut And Bolt
Courtesy of GENERAL MOTORS COMPANY

5. Install the rear spring shackle to frame bolt (2) and nut (1).

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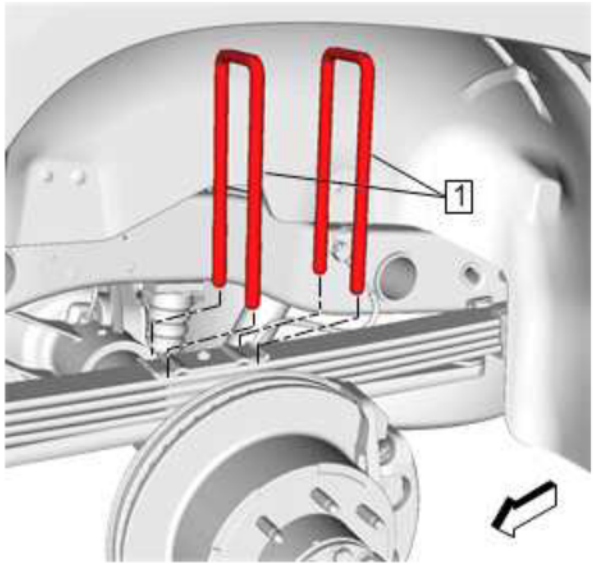

Fig. 43: Rear Spring U-Bolts
Courtesy of GENERAL MOTORS COMPANY

6. Position the NEW U-bolts (1) on the rear axle assembly
7. Using a hydraulic jack stand, lift the rear axle assembly until the it comes in contact with the rear spring assembly.

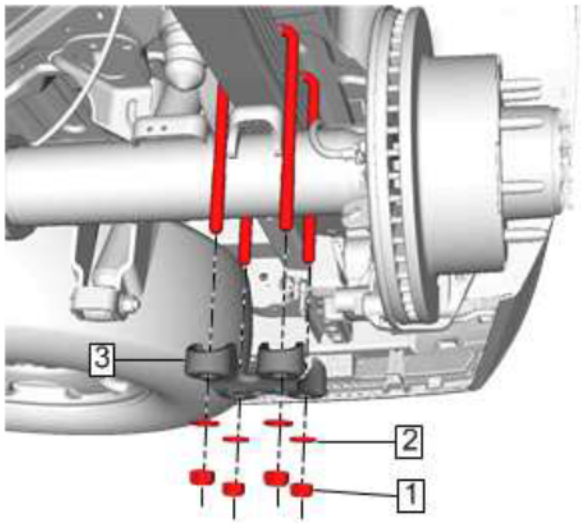

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Fig. 44: Rear Spring U-Bolt Nuts, Washers And Anchor Plate
Courtesy of GENERAL MOTORS COMPANY

CAUTION: **Refer to Fastener Caution .**

8. Install the rear spring anchor plate (3), washers (2) and tighten the U-bolt nuts (1) in a crisscross pattern to:
   - First Pass 140 N.m (74 lb ft).
   - Final Pass 90 degrees.
9. Tighten the rear spring front and rear nuts to:
   - First Pass 170 N.m (125 lb ft).
   - Final Pass 45-51 degrees.
10. Tighten the rear spring shackle to frame nut to 103 N.m (76 lb ft)
11. Install the front fuel tank assembly, if equipped. Refer to **Fuel Tank Replacement (Front Tank)**
12. Remove the rear axle support.
13. Remove the safety stands.
14. Lower the vehicle.

REAR SPRING SHACKLE REPLACEMENT (HEAVY DUTY)

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle**
2. Remove the leaf spring assembly from vehicle. Refer to **Rear Leaf Spring Replacement (Heavy Duty)**

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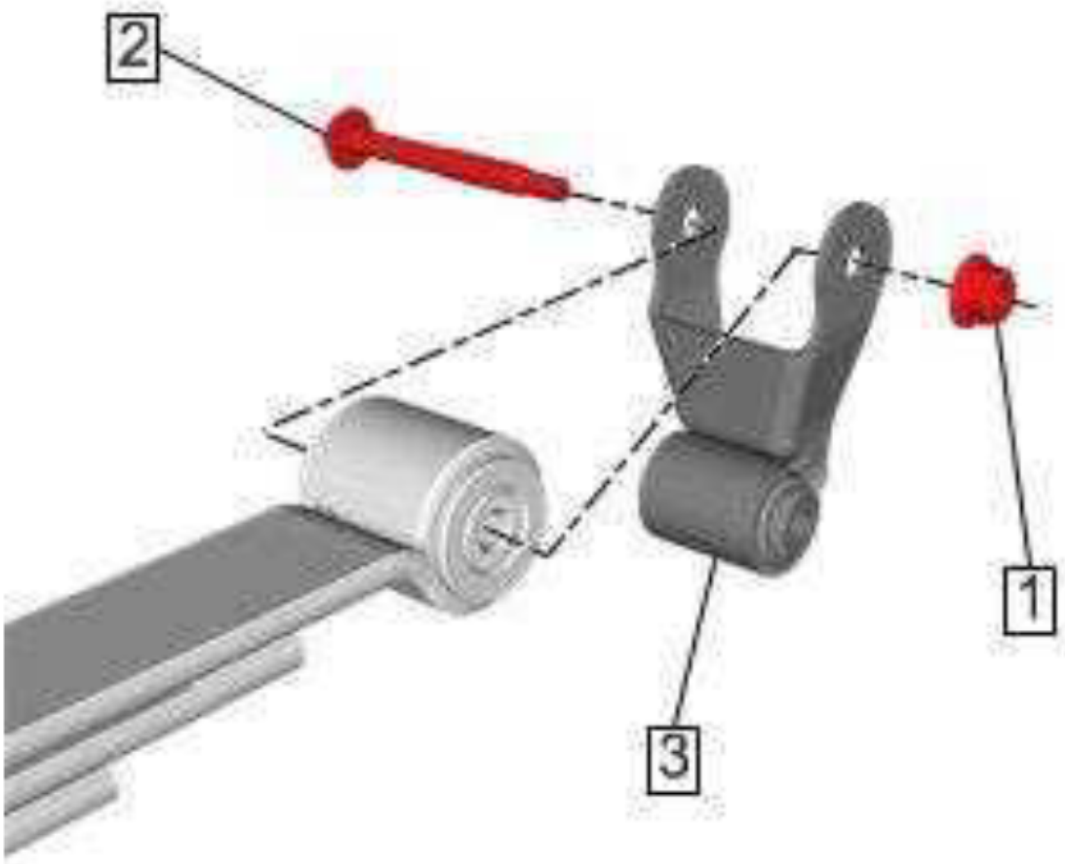

Fig. 45: Rear Spring Shackle, Nut And Bolt (2500, 3500)
Courtesy of GENERAL MOTORS COMPANY

3. Remove the shackle nut (1) and bolt (2).
4. Remove the shackle (3).

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Installation Procedure

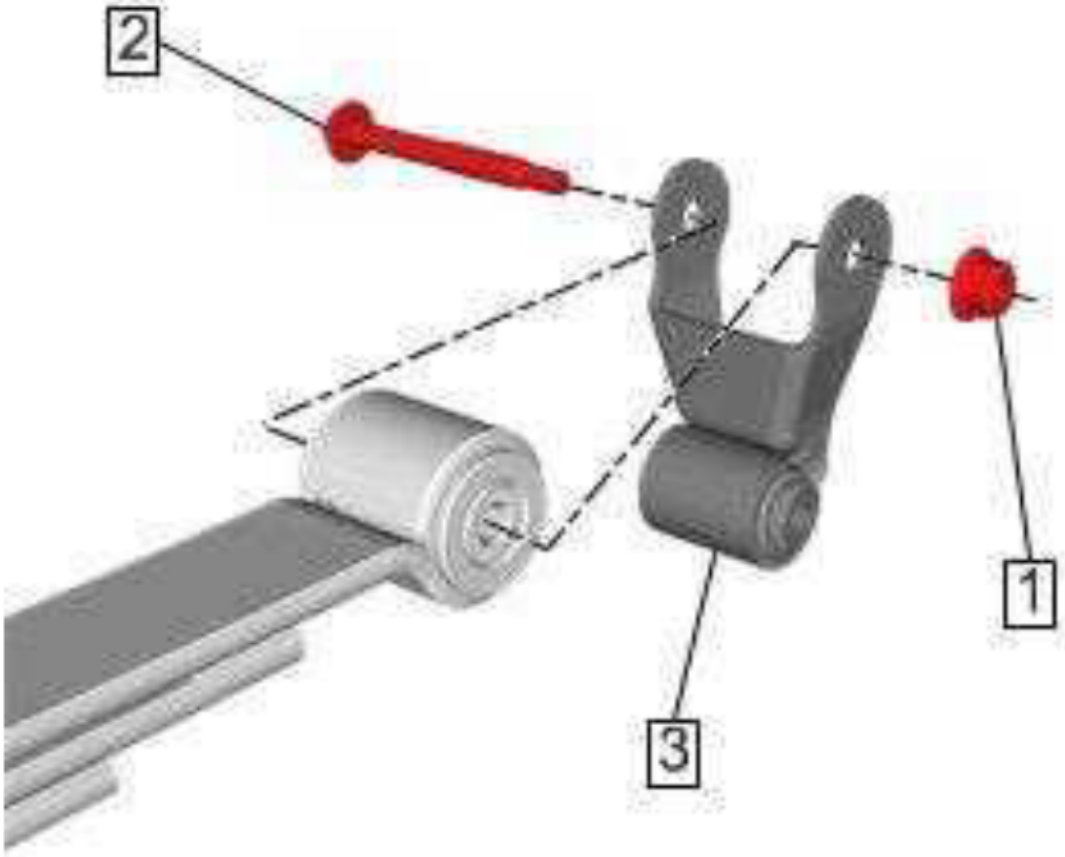

Fig. 46: Rear Spring Shackle, Nut And Bolt (2500, 3500)
Courtesy of GENERAL MOTORS COMPANY

1. Install the shackle (3) to the spring.

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CAUTION: **Refer to Fastener Caution .**

2. Install the shackle bolt (2) and nut (1) to the spring.
3. Tighten the shackle nut (1) to:

Tighten

- First pass 170 N.m (85 lb ft).
- Final pass plus 45-51 degrees

4. Install the leaf spring assembly to the vehicle. Refer to **Rear Leaf Spring Replacement (Heavy Duty)**
5. Remove the safety stands.
6. Lower the vehicle.

REAR SUSPENSION LATERAL LINK REPLACEMENT

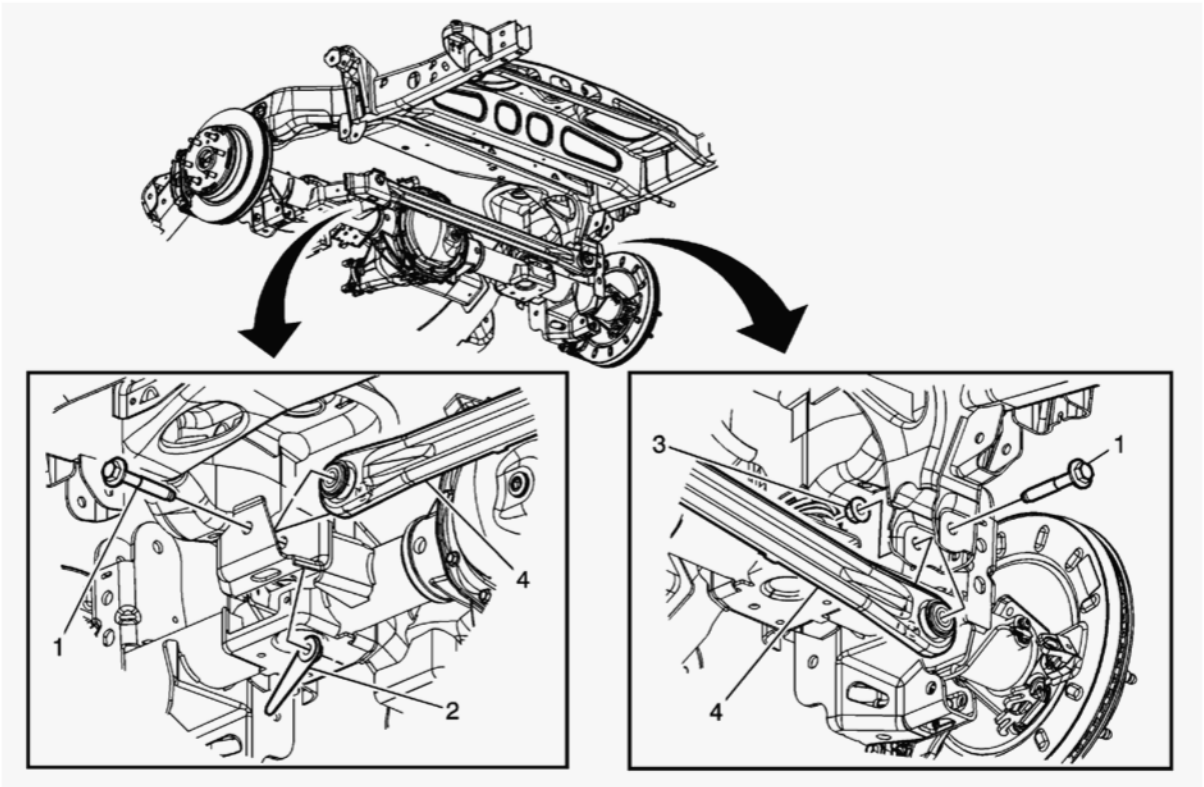

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Fig. 47: Rear Suspension Lateral Link Components
Courtesy of GENERAL MOTORS COMPANY

Callout	Component Name
Preliminary Procedure 1. Refer to **Lifting and Jacking the Vehicle** 2. Disconnect the right side stabilizer shaft link at the stabilizer shaft and reposition the link. Refer to **Stabilizer Shaft Link Replacement**.	
1	Rear Suspension Lateral Link Bolt (Qty: 2) **CAUTION:** **Refer to Fastener Caution .** **Procedure** 1. Support the rear suspension lateral link before removing either of the mounting bolts. 2. Finger tighten the mounting bolt. This will allow for movement in the rear suspension latch link to align the opposite end mounting bolt and hole. **Tighten** • Rear Suspension Lateral Link to Frame: 85 N.m (63 lb ft) plus 125 degrees • Rear Suspension Lateral Link to Axle: 85 N.m (63 lb ft) plus 125 degrees
2	Rear Suspension Lateral Link Lower Nut
3	Rear Suspension Lateral Link Upper Nut
4	Rear Suspension Lateral Link **Procedure** Disconnect the park brake cable from the rear axle tie rod.

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REAR SUSPENSION UPPER TRAILING LINK REPLACEMENT

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Remove the rear wheelhouse liner. Refer to **Rear Wheelhouse Liner Replacement (LWB)** **Rear Wheelhouse Liner Replacement (LWB Z75)** **Rear Wheelhouse Liner Replacement (SWB Z75)** **Rear Wheelhouse Liner Replacement (SWB)**

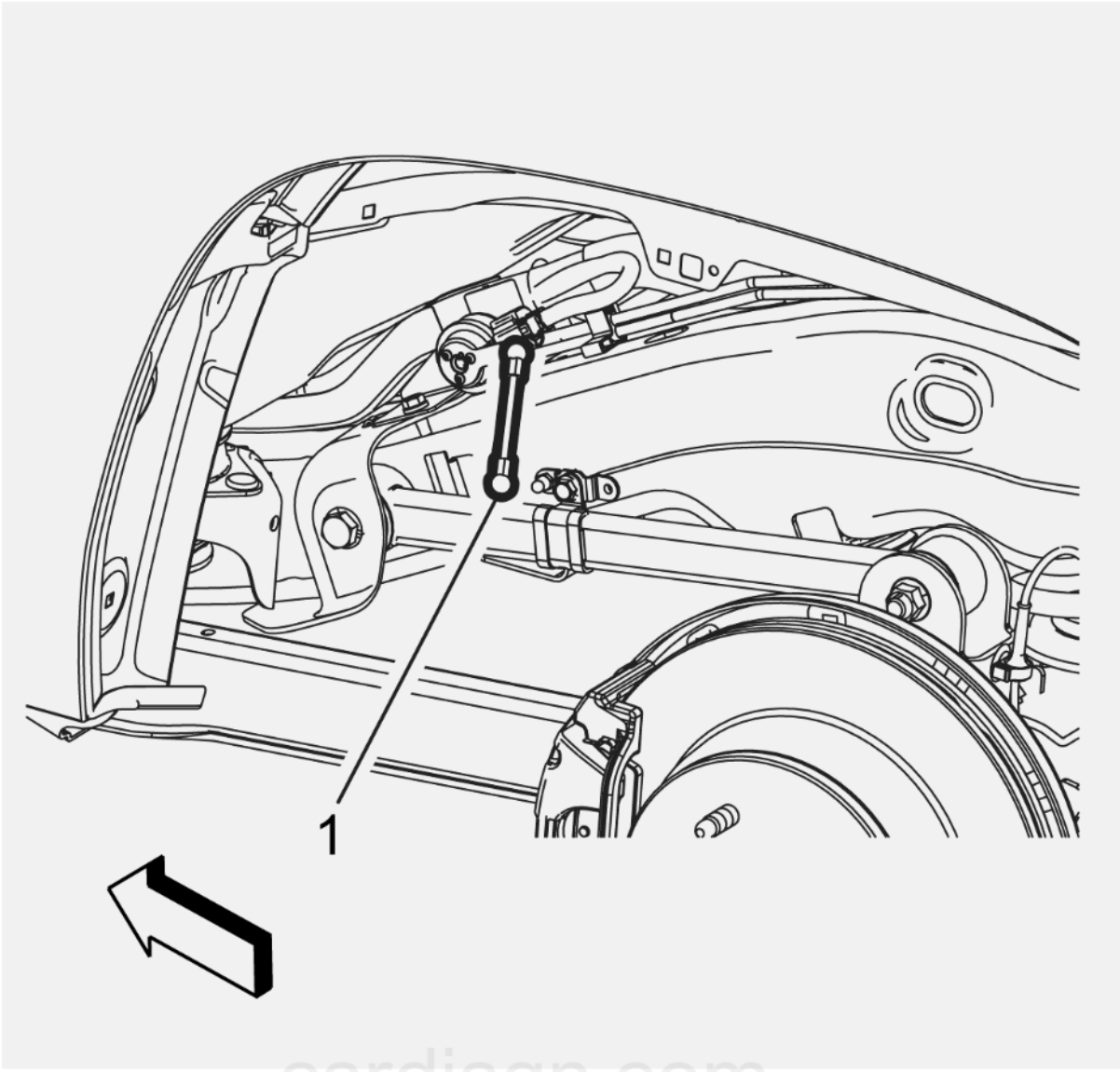

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Fig. 48: Electronic Suspension Control (ESC) Sensor Link
Courtesy of GENERAL MOTORS COMPANY

3. Disconnect the electronic suspension control (ESC) sensor link (1) from the rear suspension upper trailing arm. Refer to **Electronic Suspension Rear Position Sensor Replacement - Left Side** , or **Electronic Suspension Rear Position Sensor Replacement - Right Side** .
4. Support the rear axle.

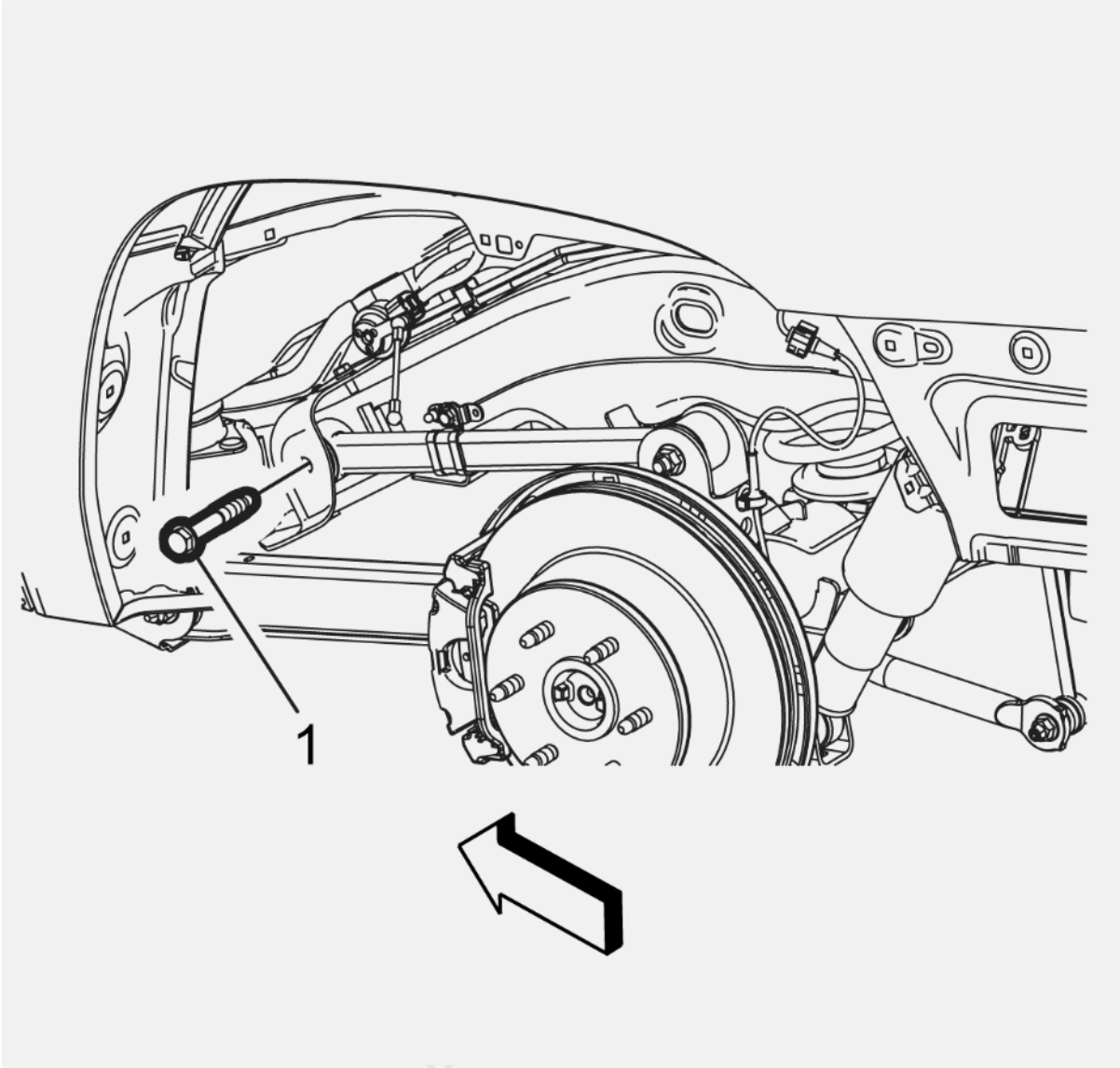

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Fig. 49: Rear Suspension Upper Trailing Arm Front Bolt
Courtesy of GENERAL MOTORS COMPANY

5. Remove the rear suspension upper trailing arm front bolt (1).

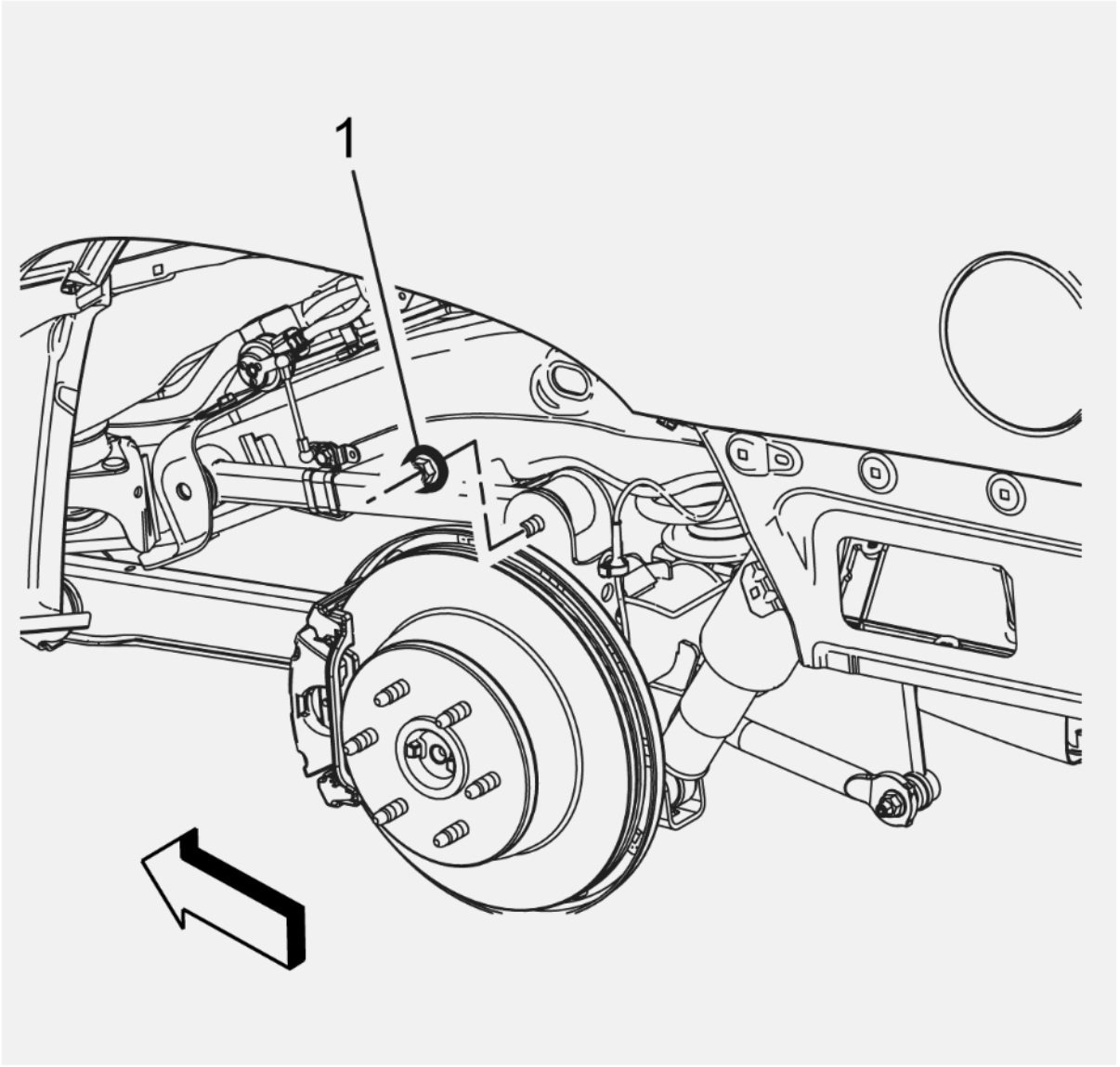

Fig. 50: Rear Suspension Upper Trailing Arm Nut

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Courtesy of GENERAL MOTORS COMPANY

6. Remove the rear suspension upper trailing arm nut (1).

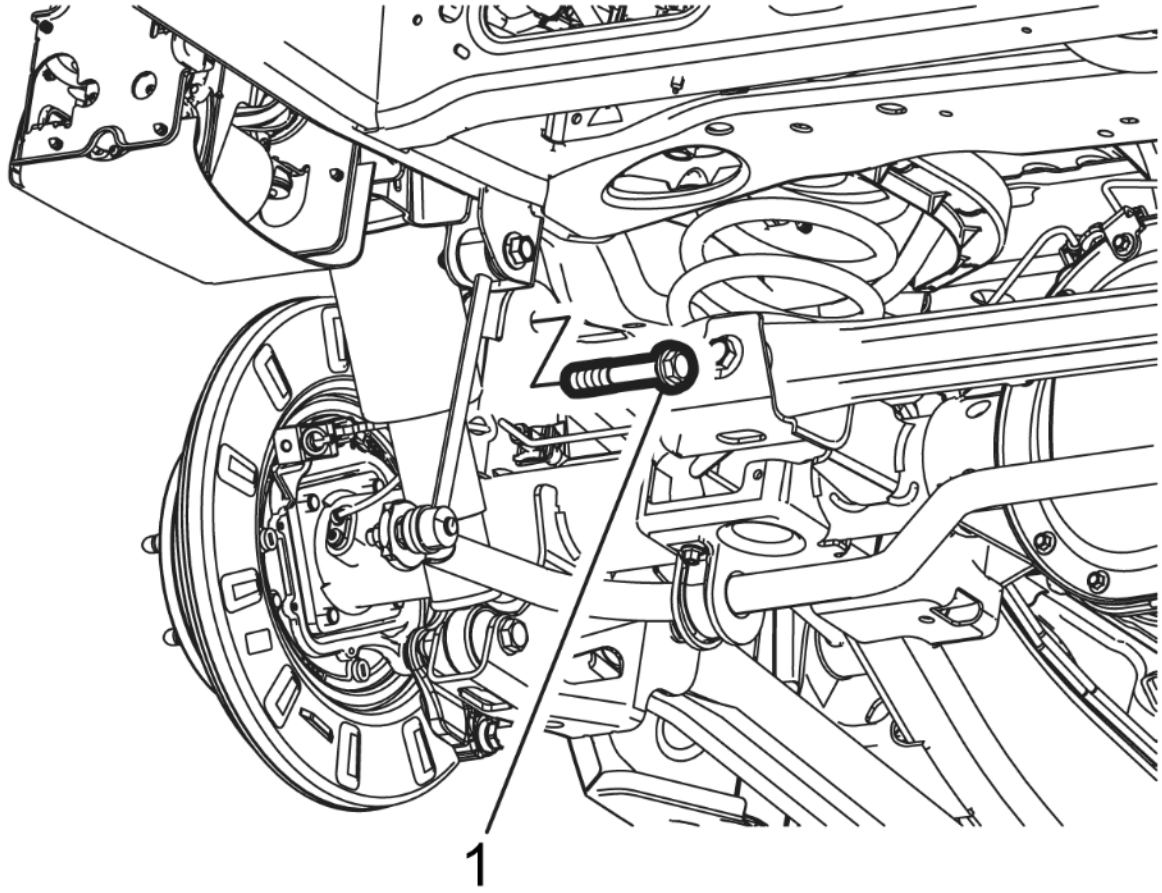

Fig. 51: Rear Suspension Upper Trailing Arm Bolt
Courtesy of GENERAL MOTORS COMPANY

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7. Remove the rear suspension upper trailing arm bolt (1).

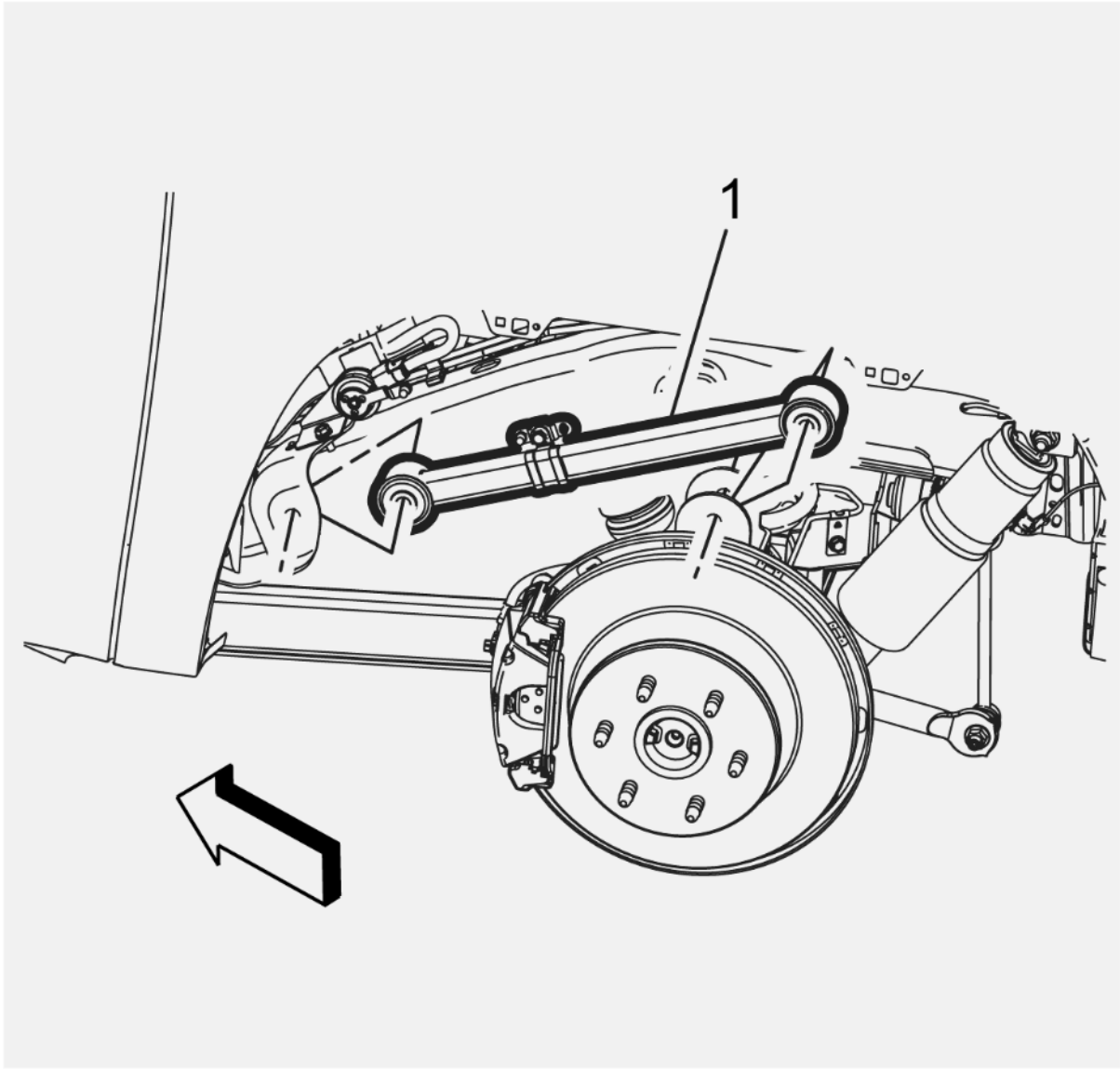

Fig. 52: Rear Suspension Upper Trailing Arm
Courtesy of GENERAL MOTORS COMPANY

8. Remove the rear suspension upper trailing arm (1).

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Installation Procedure

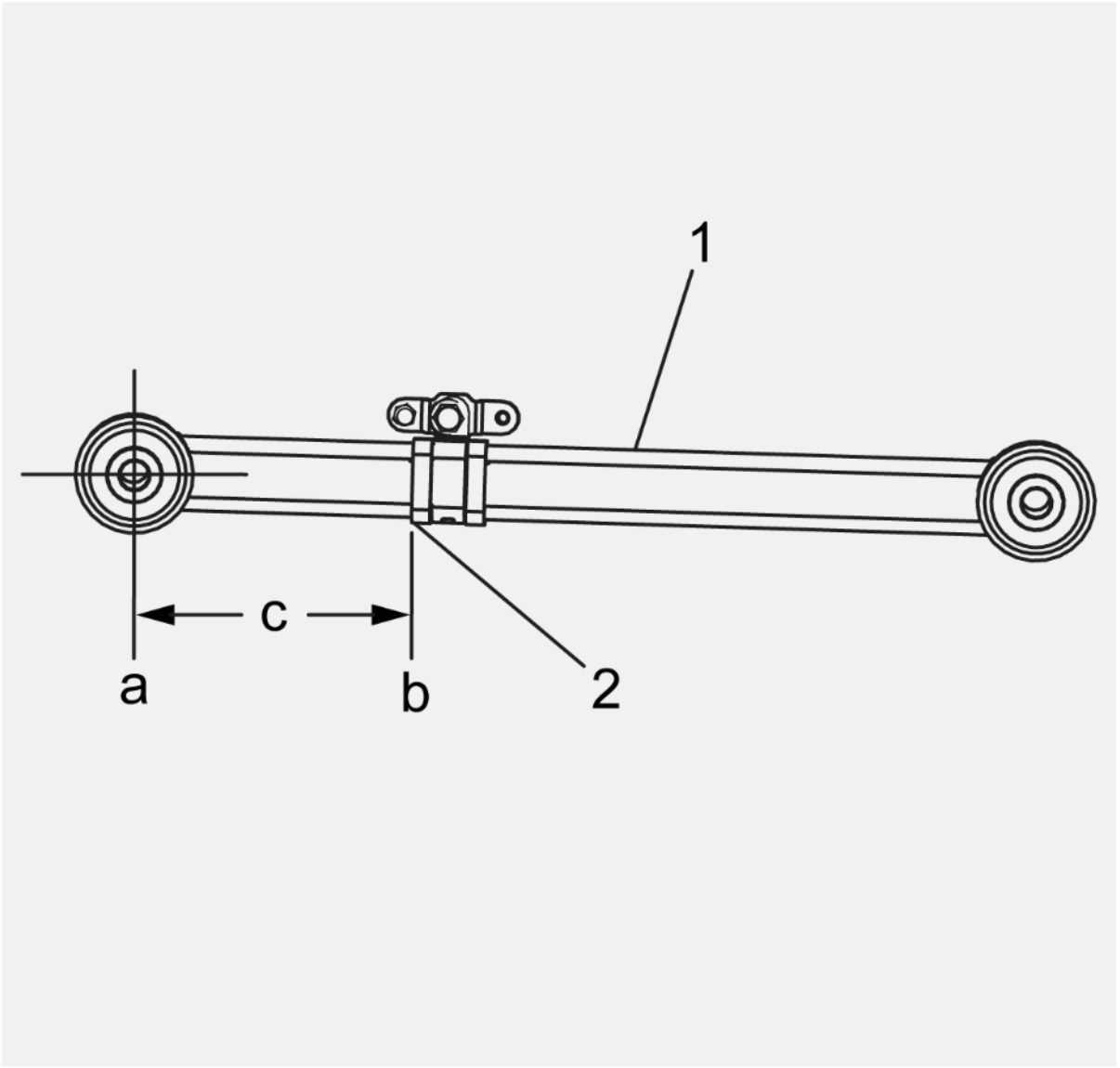

Fig. 53: Measuring Distance From Center Of Front Bushing To Edge Of Electronic Suspension Sensor Bracket
Courtesy of GENERAL MOTORS COMPANY

1. Measure the distance from (A) center of front bushing to (B) the edge of the electronic suspension sensor bracket and make note of measurement (C). Transfer the electronic suspension sensor bracket (2) from the old upper trailing arm (1) to the new, being sure reinstall the

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electronic suspension sensor control bracket, using the measurement taken earlier.

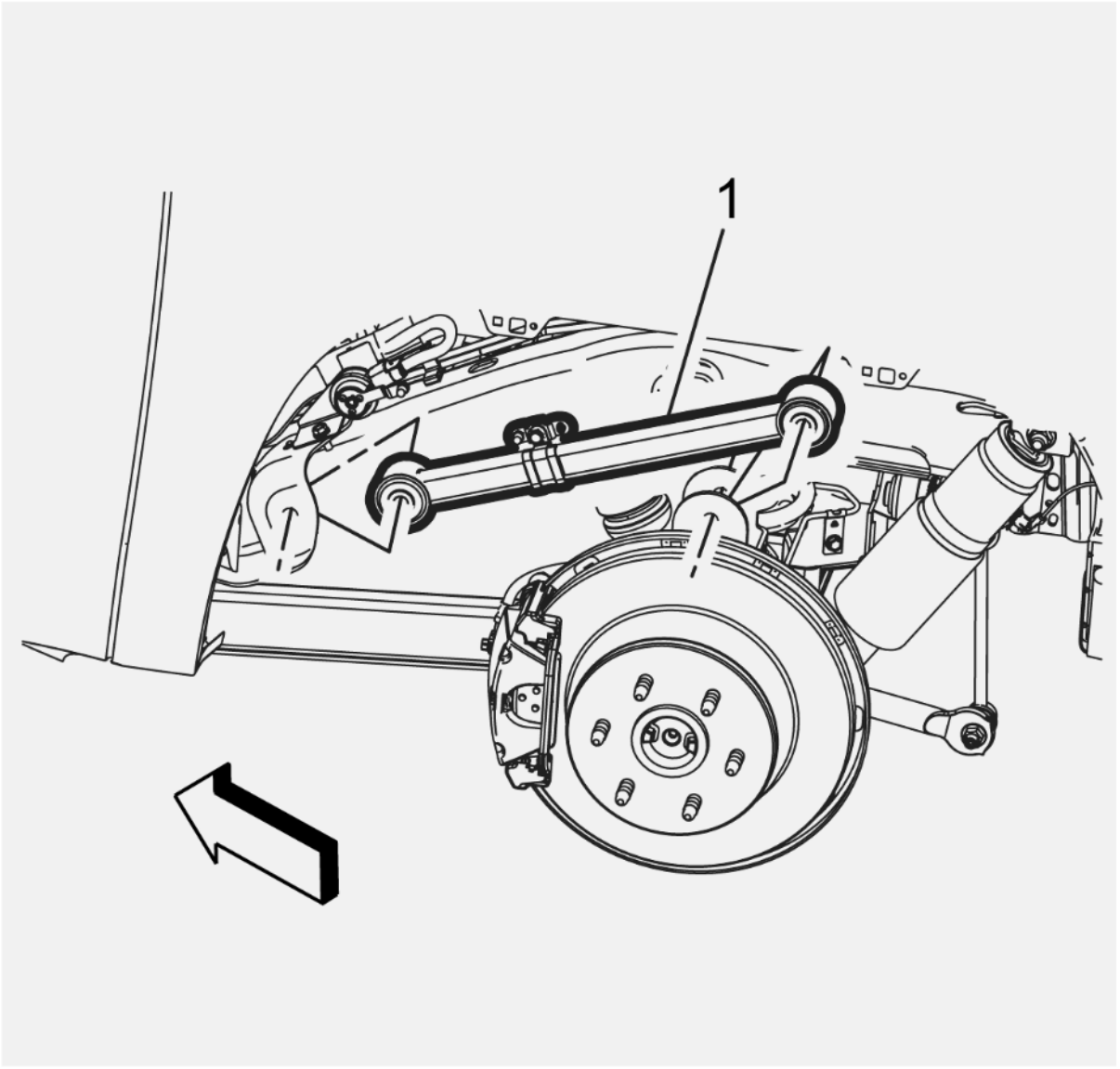

Fig. 54: Rear Suspension Upper Trailing Arm
Courtesy of GENERAL MOTORS COMPANY

2. Install the rear suspension upper trailing arm (1).

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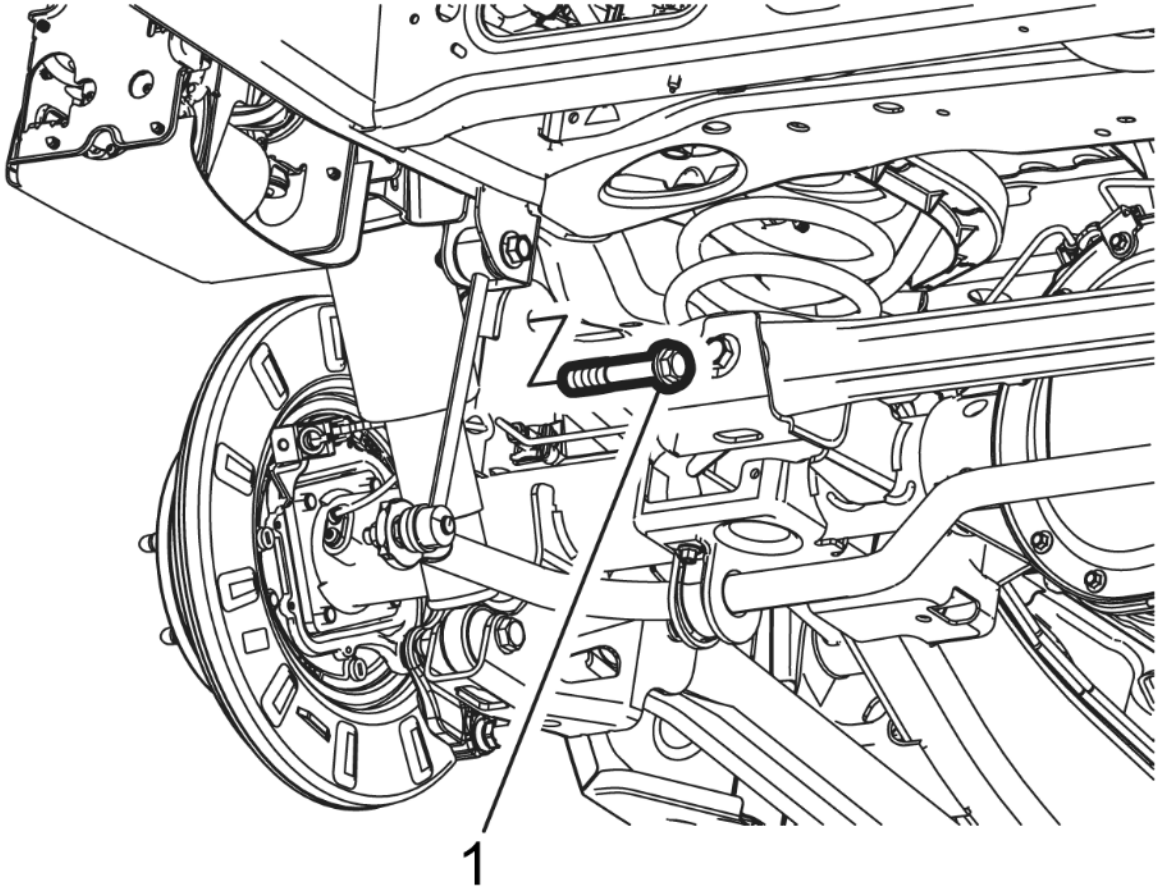

Fig. 55: Rear Suspension Upper Trailing Arm Bolt
Courtesy of GENERAL MOTORS COMPANY

3. Install the rear suspension upper trailing arm bolt (1).

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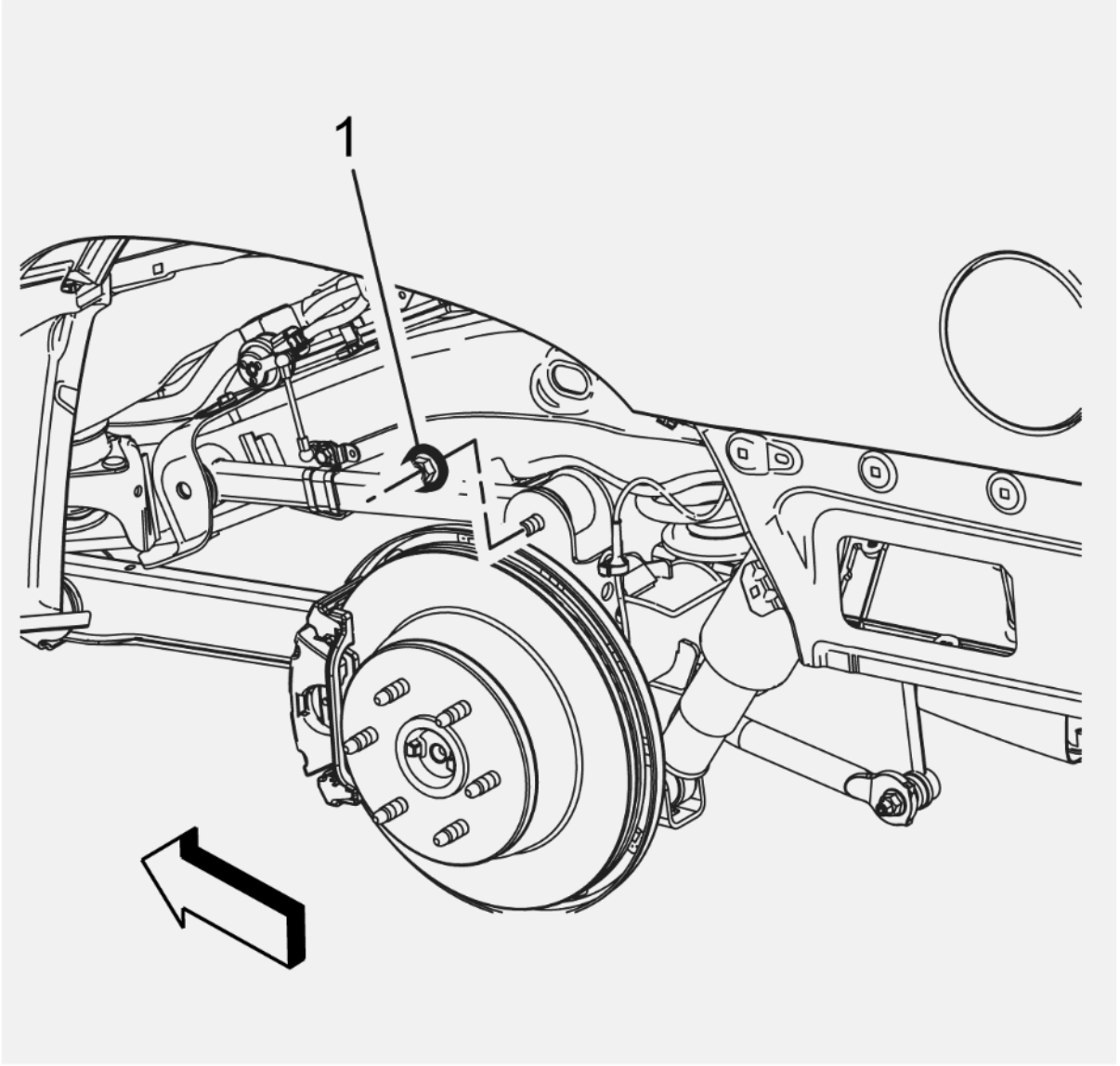

Fig. 56: Rear Suspension Upper Trailing Arm Nut
Courtesy of GENERAL MOTORS COMPANY

4. Install the rear suspension upper trailing arm nut (1).

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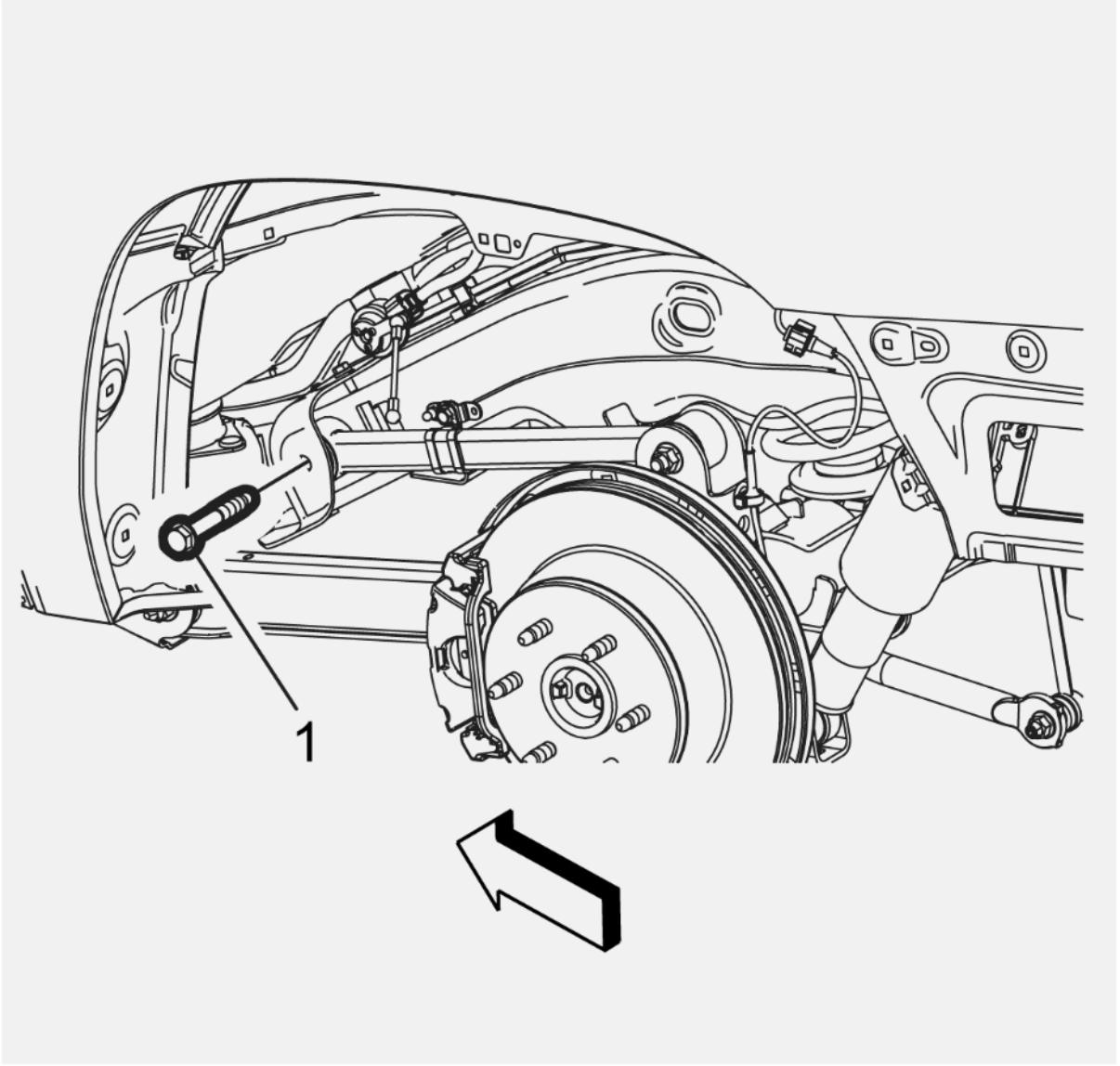

Fig. 57: Rear Suspension Upper Trailing Arm Front Bolt
Courtesy of GENERAL MOTORS COMPANY

5. Install the rear suspension upper trailing arm front bolt (1).

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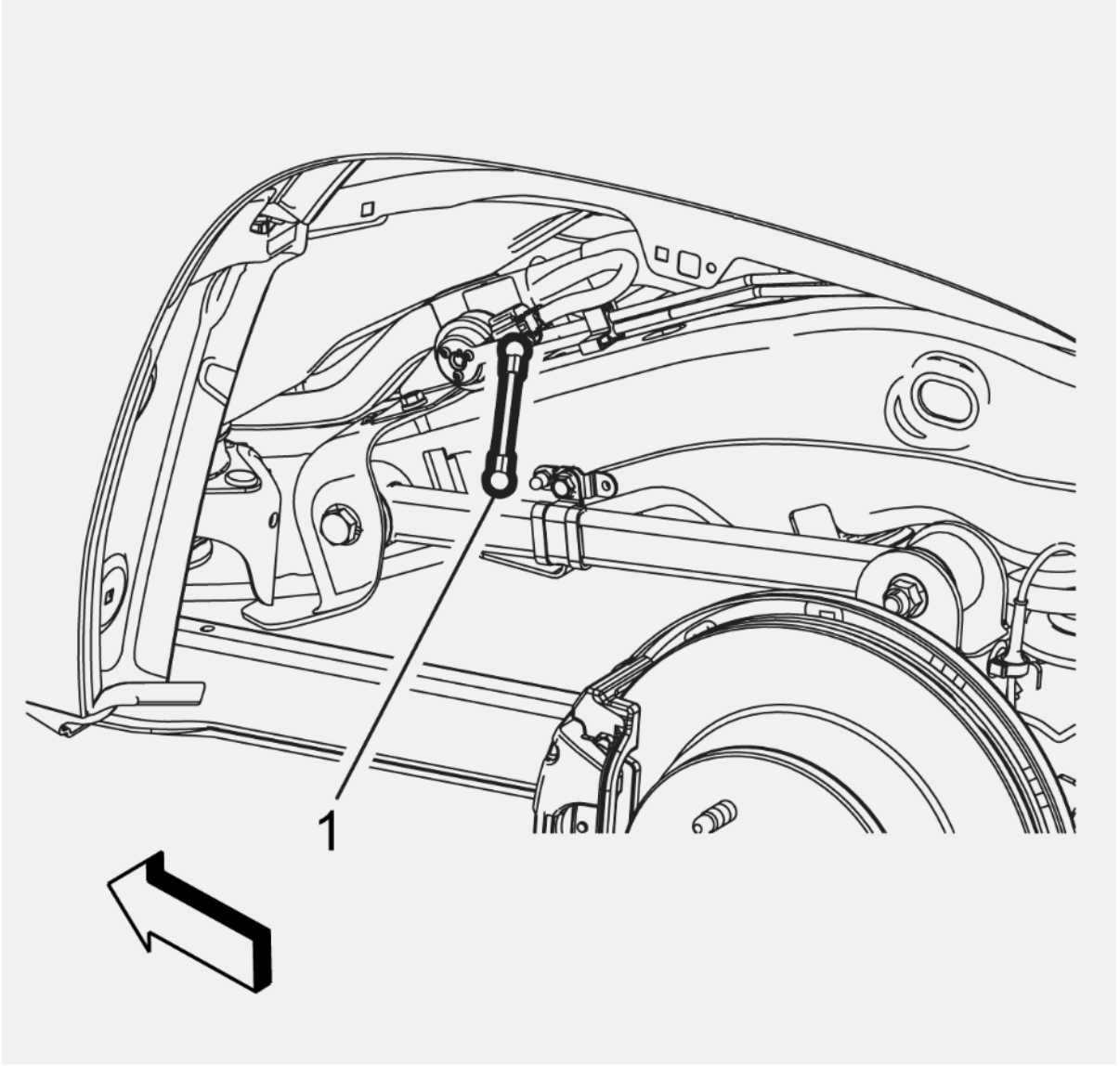

Fig. 58: Electronic Suspension Control (ESC) Sensor Link
Courtesy of GENERAL MOTORS COMPANY

6. Connect the ESC sensor link to the electronic suspension control sensor bracket. Refer to **Electronic Suspension Rear Position Sensor Replacement - Left Side** , or **Electronic Suspension Rear Position Sensor Replacement - Right Side** .
7. Remove the support from the rear axle.

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8. Lower the vehicle.

CAUTION: **Refer to Fastener Caution .**

NOTE: **Do not tighten the fasteners unless the suspension is at the curb height position.**

9. Hold the rear suspension trailing arm nut and tighten the rear suspension trailing arm bolt.

Tighten

- First Pass: 100 N.m (74 lb ft)
- Final Pass: plus 55 degrees

NOTE: **Do not tighten the fasteners unless the suspension is at the curb height position.**

10. Tighten the rear suspension upper trailing arm bolt to (1):
11. **Tighten**
    - First Pass: 100 N.m (74 lb ft)
    - Final Pass: plus 55 degrees
12. Install the rear wheelhouse liner. Refer to **Rear Wheelhouse Liner Replacement (LWB)** **Rear Wheelhouse Liner Replacement (LWB Z75)** **Rear Wheelhouse Liner Replacement (SWB Z75)** **Rear Wheelhouse Liner Replacement (SWB)** .

LOWER CONTROL ARM REPLACEMENT

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Support the vehicle at curb height.

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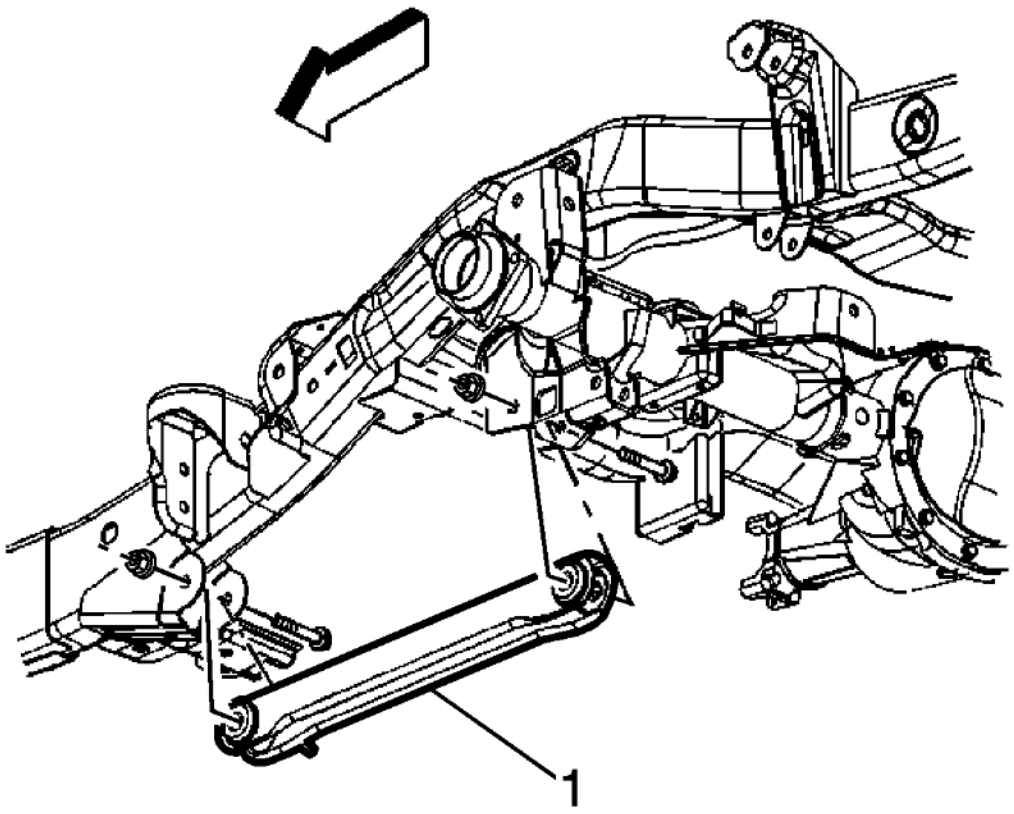

Fig. 59: Lower Control Arm, Retaining Nuts & Bolts
Courtesy of GENERAL MOTORS COMPANY

3. Remove the lower control arm retaining nuts.
4. Remove the lower control arm retaining bolt.
5. Remove the lower control arm (1).

Installation Procedure

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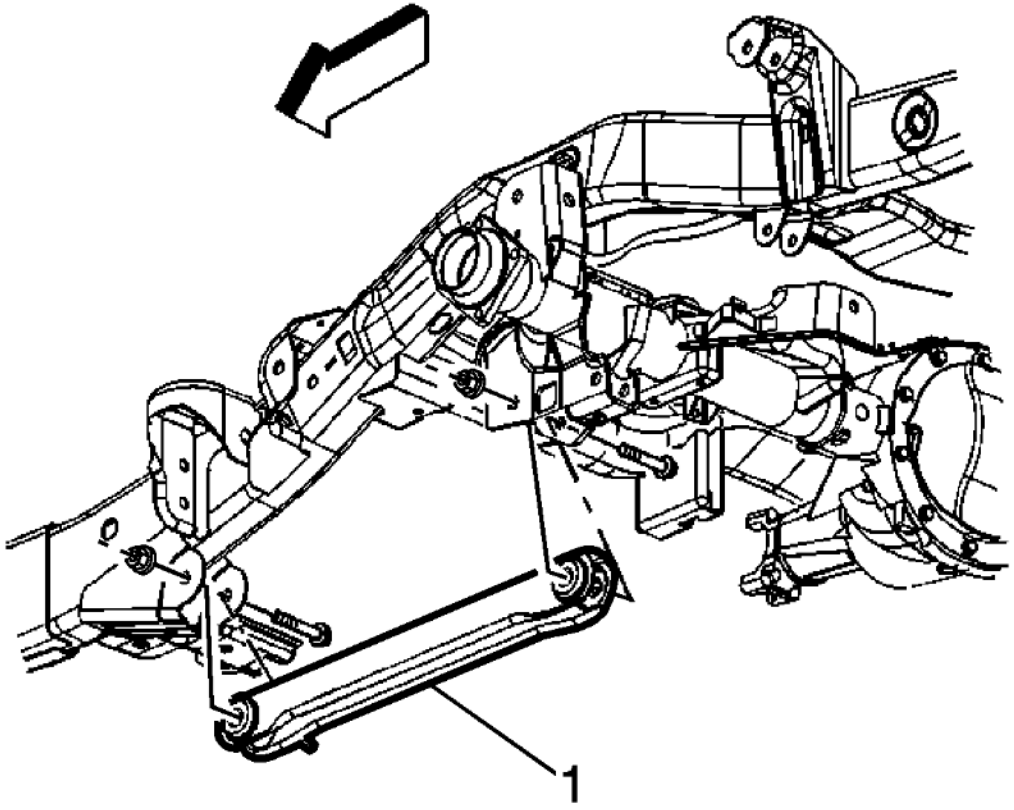

Fig. 60: Lower Control Arm, Retaining Nuts & Bolts
Courtesy of GENERAL MOTORS COMPANY

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

CAUTION: Refer to Fastener Caution .

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

3. Install the lower control arm retaining nut and tighten:

   Tighten

   - First Pass: 100 N.m (74 lb ft).
   - Final Pass: plus 95 degrees.
4. Remove the rear axle support.
5. Lower the vehicle.

WHEEL STUD REPLACEMENT (1500)

Tools Required

J 43631 Ball Joint Remover

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Remove the tire and wheel. Refer to **Tire and Wheel Removal and Installation (6-Lug Wheel)** .
3. Remove the brake rotor. Refer to **Rear Brake Rotor Replacement (JD9)** **Rear Brake Rotor Replacement (J95)** .

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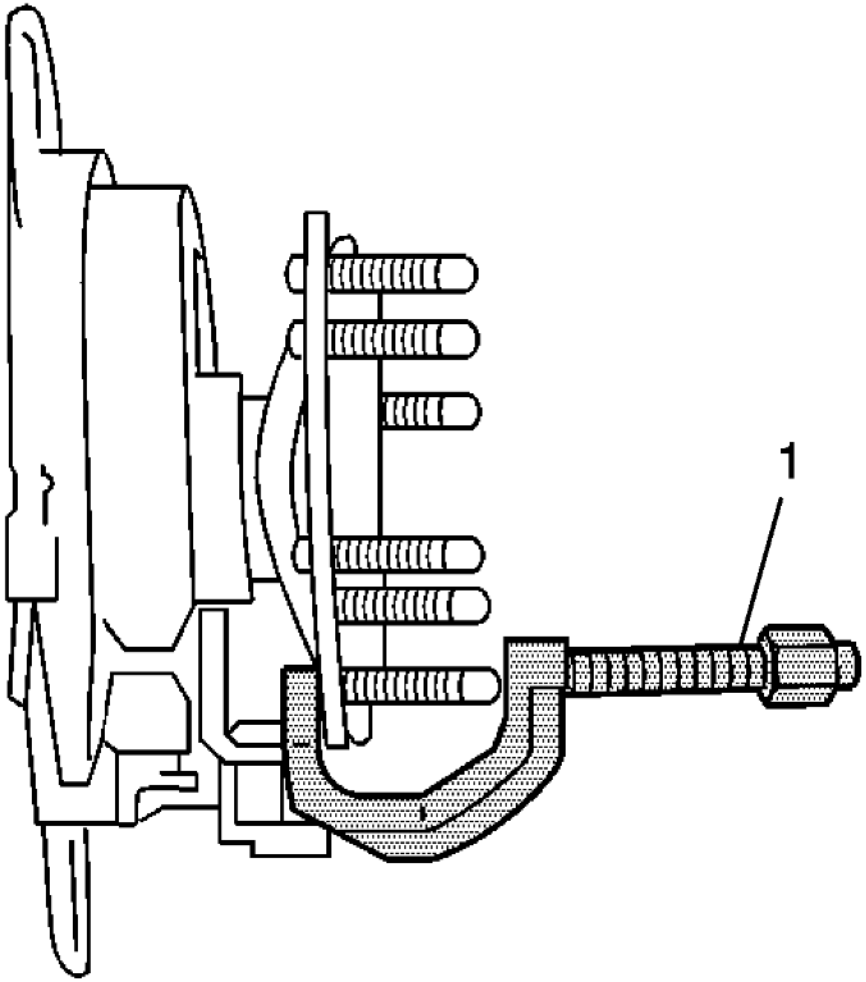

Fig. 61: Removing Wheel Stud From Hub Flange
Courtesy of GENERAL MOTORS COMPANY

4. Remove the wheel stud from the hub flange using the **J 43631** ball joint remover.
5. Remove the wheel stud from the hub flange.

Installation Procedure

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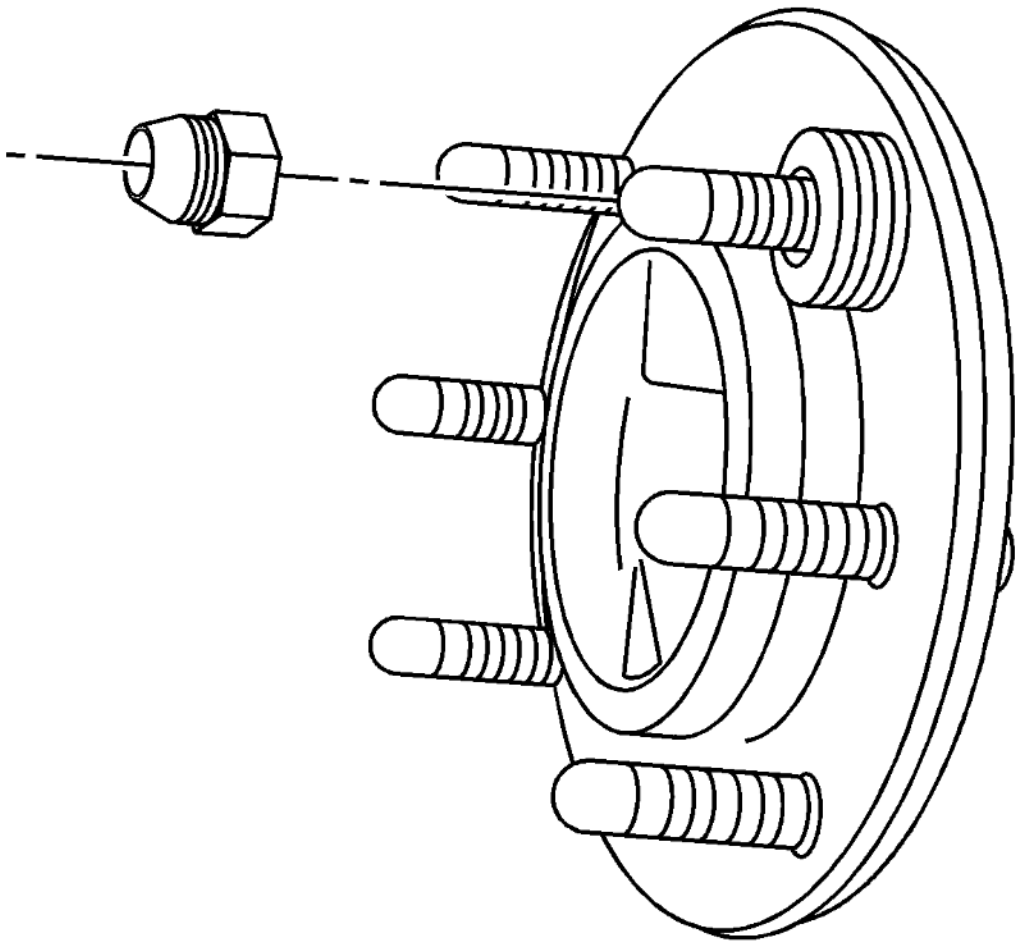

Fig. 62: Wheel Nut And Studs
Courtesy of GENERAL MOTORS COMPANY

1. Install the new stud into the hub flange hole using firm hand pressure.
2. Install 4 washers to the new wheel stud.
3. Thread a wheel nut onto the new stud with the flat side facing the front hub flange.
4. Tighten the lug nut until the stud contacts the back of the hub flange.

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5. Remove the wheel nut.
6. Remove the washers.
7. Install the brake rotor. Refer to **Rear Brake Rotor Replacement (JD9)** **Rear Brake Rotor Replacement (J95)** .
8. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation (6-Lug Wheel)** .
9. Remove the safety stands.
10. Lower the vehicle.

WHEEL STUD REPLACEMENT (HEAVY DUTY)

Special Tools

CH-43631 Ball Stud Remover

For equivalent regional tools, refer to **Special Tools**.

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle**
2. Remove the tire and wheel. Refer to **Tire and Wheel Removal and Installation (8-Lug Wheel)**
3. Remove the brake rotor. Refer to **Rear Brake Rotor Replacement (JD9)** **Rear Brake Rotor Replacement (J95)**

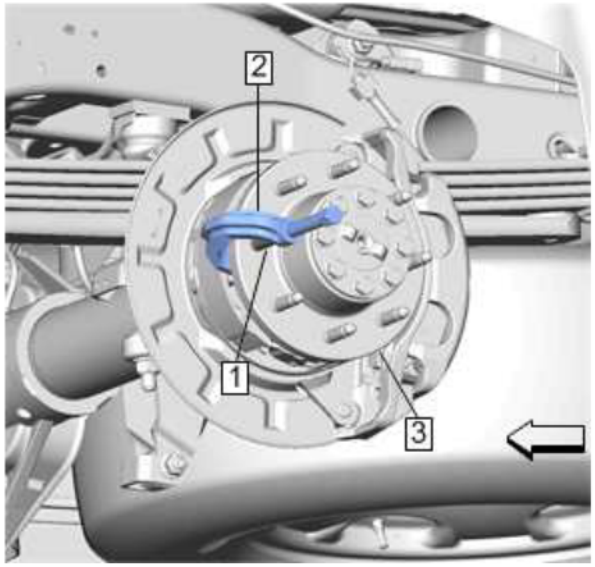

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Fig. 63: Removing Wheel Stud From Hub Flange
Courtesy of GENERAL MOTORS COMPANY

4. Using the **CH-43631** remover (2), remove the wheel stud (1).
5. Remove the wheel stud (1) from the hub flange (3).

Installation Procedure

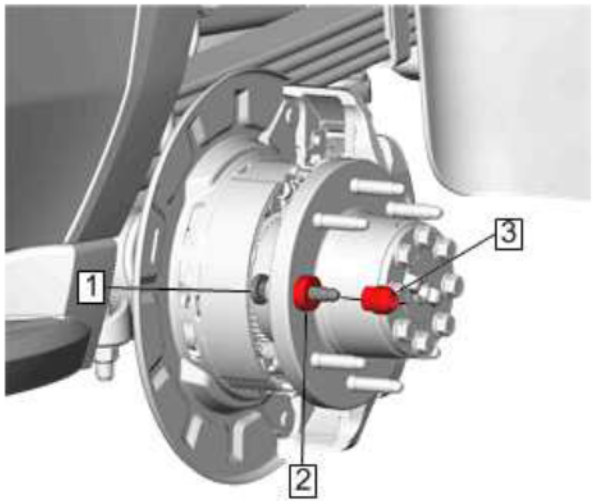

Fig. 64: Wheel Stud, Washers And Wheel Nut
Courtesy of GENERAL MOTORS COMPANY

1. Install the new stud into the hub flange hole using firm hand pressure.
2. Install 4 washers (2) to the new wheel stud (1).
3. Thread a wheel nut (3) onto the new stud (1) with the flat side facing the front hub flange.
4. Tighten the wheel nut until the stud contacts the back of the hub flange.
5. Remove the wheel nut (3).
6. Remove the washers (2).
7. Install the brake rotor. Refer to **Rear Brake Rotor Replacement (JD9)** **Rear Brake Rotor Replacement (J95)**
8. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation (8-Lug Wheel)** 9

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9. Remove the safety stands.
10. Lower the vehicle.

DESCRIPTION AND OPERATION

GENERAL DESCRIPTION

The 1500 series utility vehicles use a 5-link rear suspension system. The rear axle is attached to the frame with the upper trailing control arms, lower control arms, and a latch link bar. Two coil springs and a link mounted rear stabilizer shaft to complete the system.

SPECIAL TOOLS AND EQUIPMENT

SPECIAL TOOLS

Illustration	Tool Number/Description

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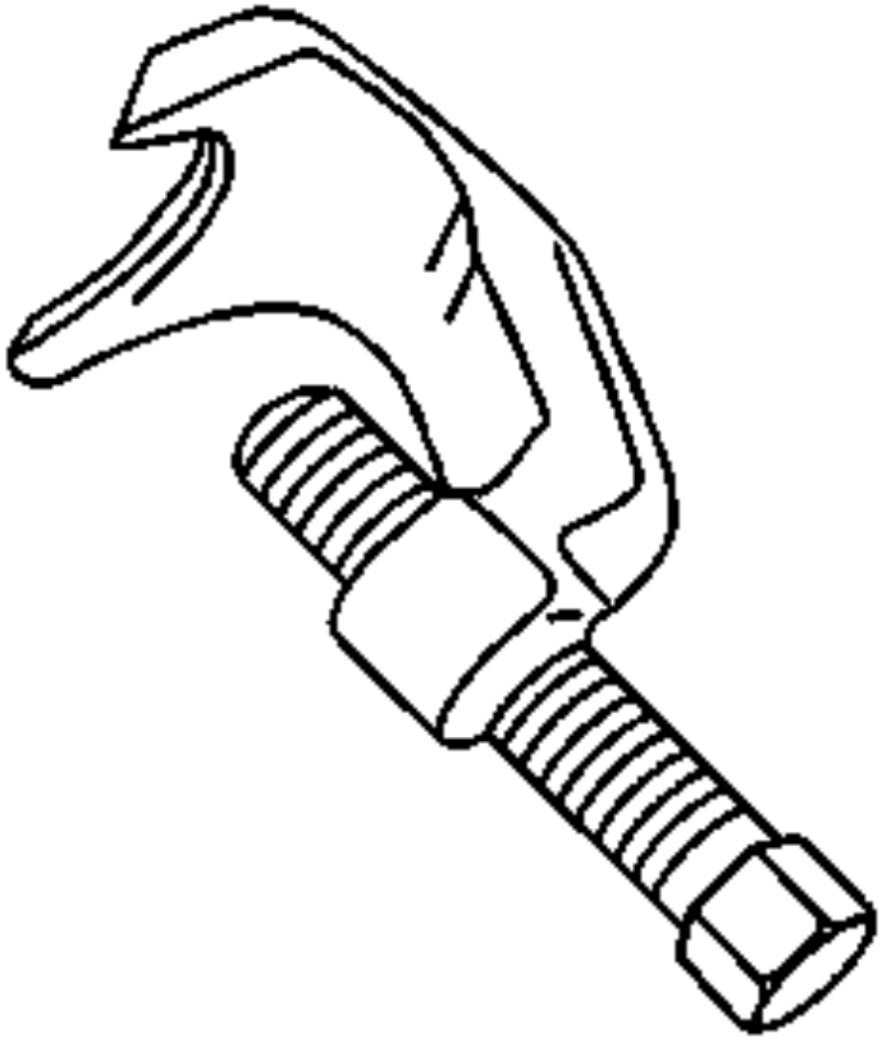
Illustration	Tool Number/Description
	J 43631 Ball Joint Remover

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