



Jounce Shock Absorber Package Installation

Installation Instructions Part Number

85639118

Kit Contents

| Description | Quantity |
|---|----------|
| Rear Jounce Shock  | 2 |
| Front Jounce Shock  | 2 |
| Front Shock Spacer | 2 |
| M8 Nut | 16 |
| Heavy Hex Bolt | 4 |
| U-Bolt | 4 |
| Rear Jounce Plate | 2 |
| Rear Cross Bar | 1 |
| Rear Jounce Bumper Stop | 2 |
| Instruction sheet | 1 |

Tools Required

- CH-45400-B Strut Spring Compressor
- CH-42188-B Ball Joint Separator
- Suitable Cutting Tool

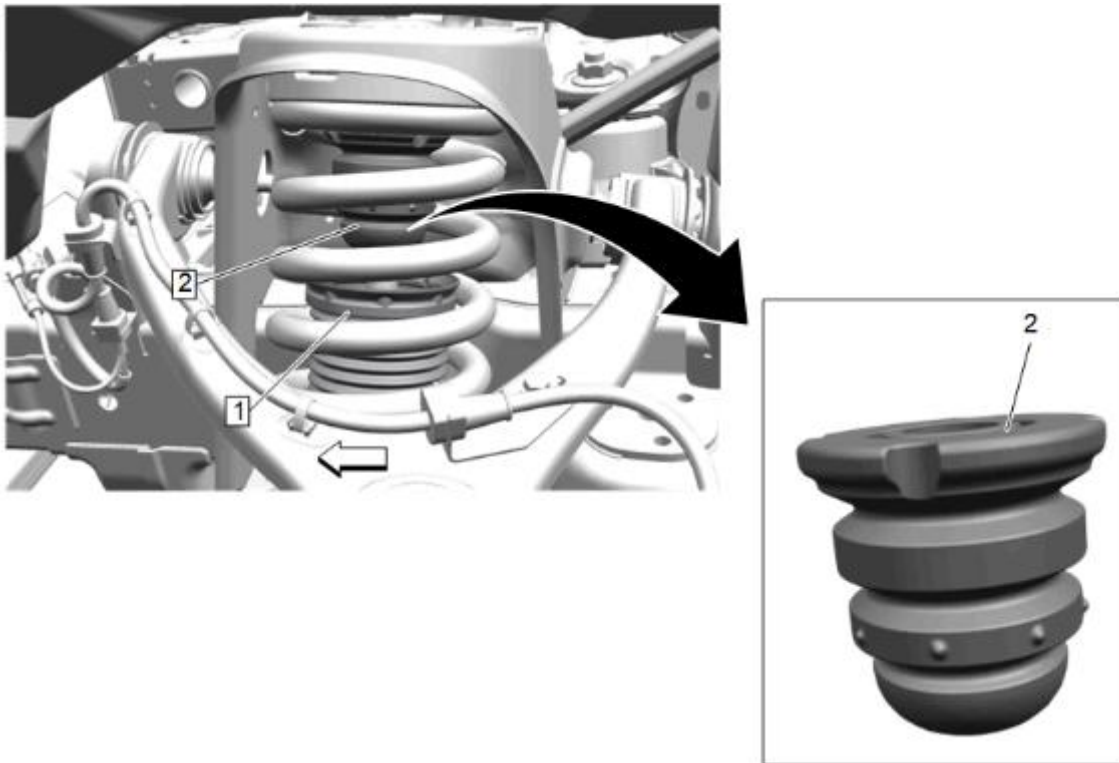
Equivalent regional tools: [Special Tools](#)

Procedure

Preliminary Procedures

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#) in Vehicle Service Manual.
2. Remove the front and rear wheel and tire assemblies. Refer to [Tire and Wheel Removal and Installation](#) in Vehicle Service Manual.

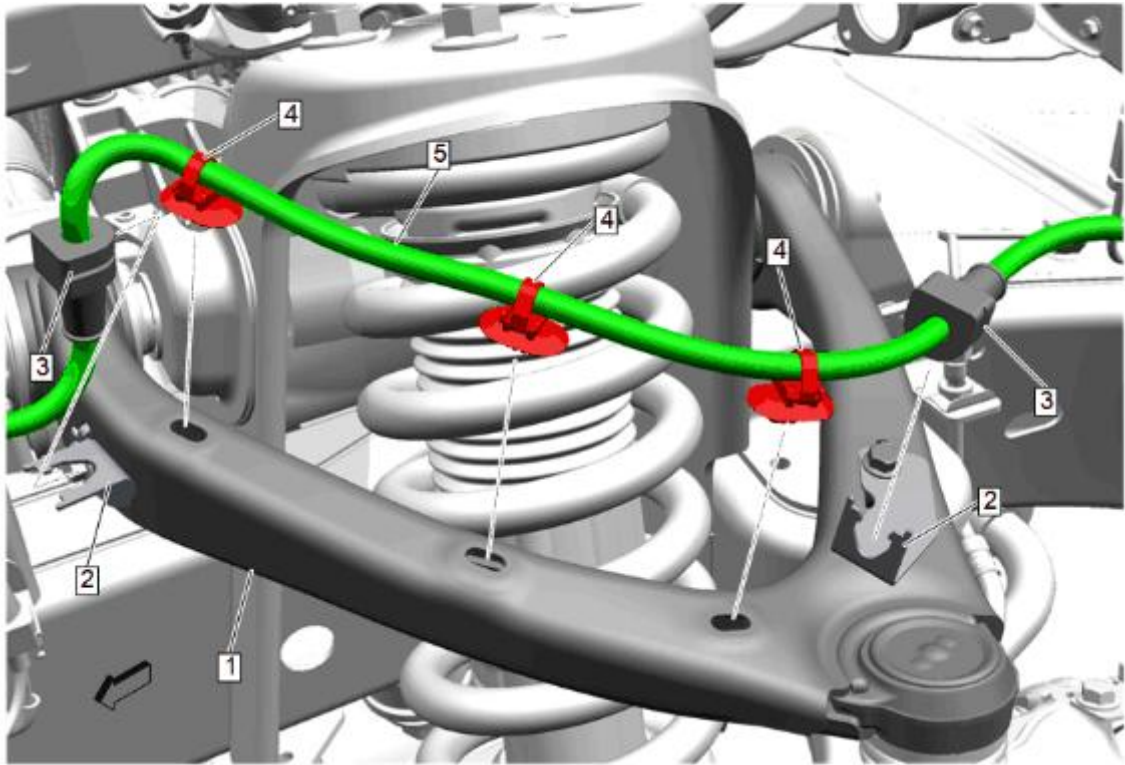
Cut Out and Remove Front Jounce Bumper On Vehicle (AEV Edition Canyon Vehicles Only)



Note: These next three steps apply to AEV Edition Canyon Vehicles Only.

1. Disengage and pull down the front shock absorber boot (1).
2. Using a suitable cutting tool, remove the front shock absorber upper bumper (2) from the shock absorber.
3. Pull up and re-engage the front shock absorber boot (1).
4. Repeat steps 1 - 3 for opposite side.

Front Jounce Shock

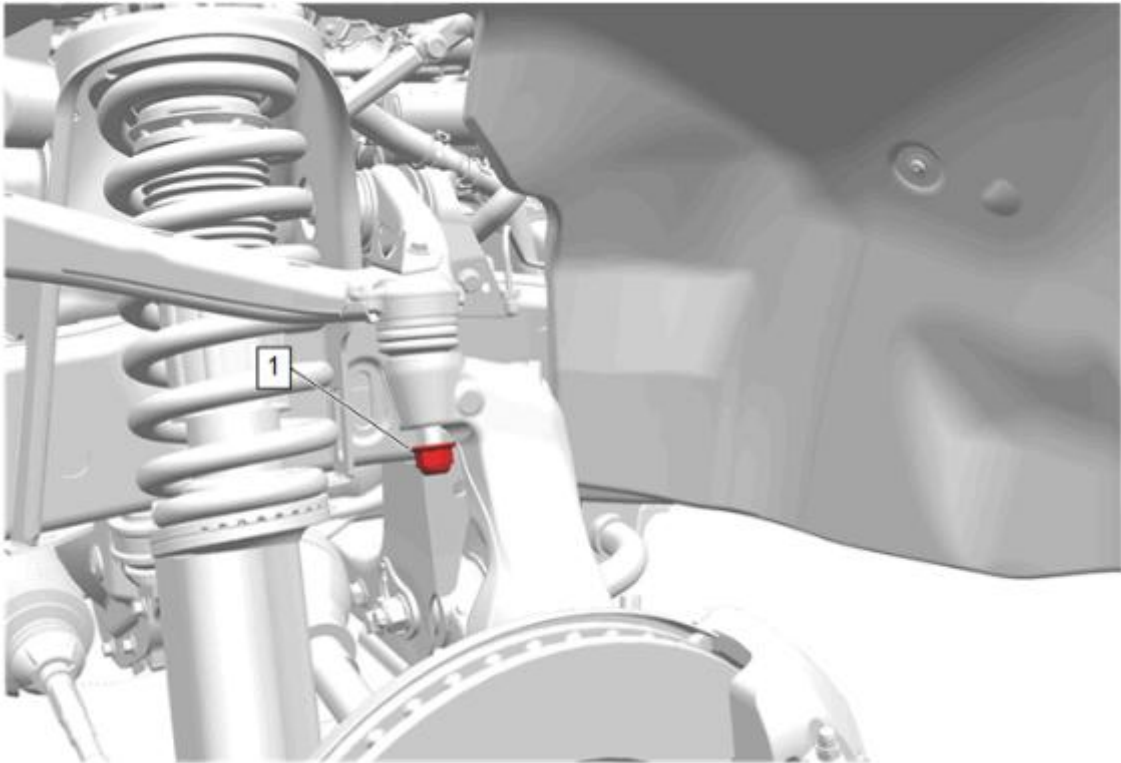


Note: If the vehicle is equipped with AEV edition Canyon continue to step 42, as steps 1 through 41 do not apply to AEV edition Canyon vehicles.

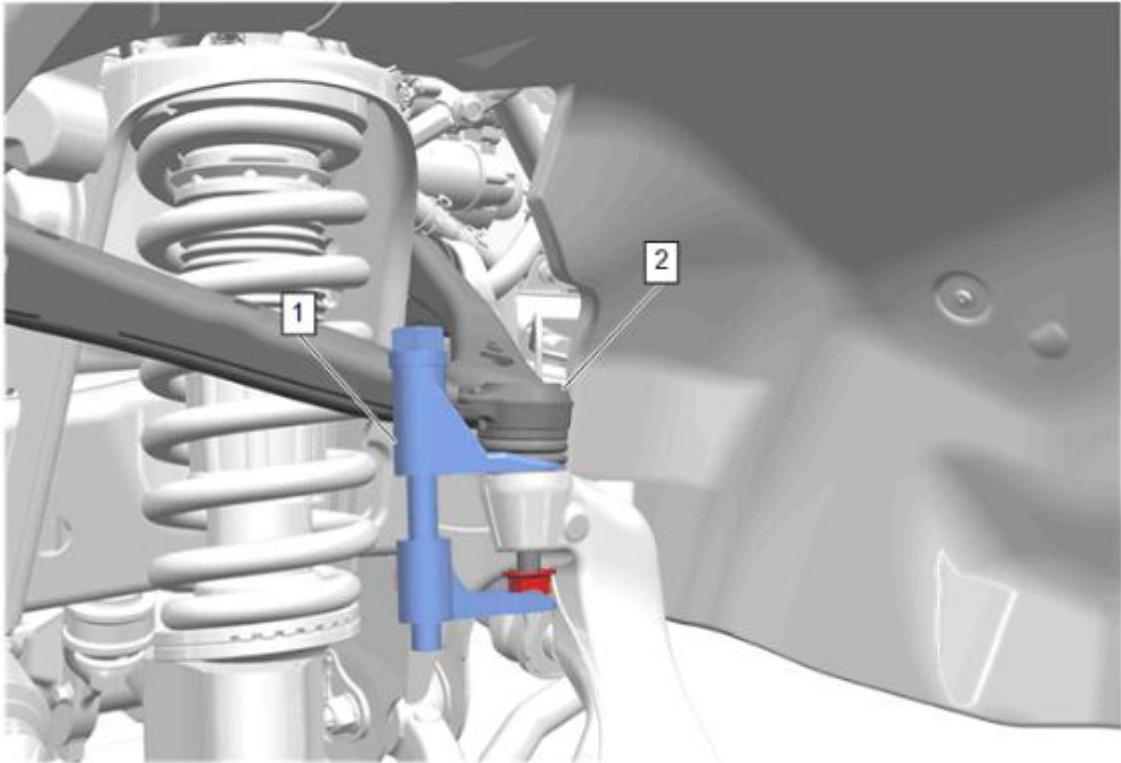
1. Disengage the front wheel speed sensor harness grommets (3) from the brackets (2).
2. Disengage the retainers (4) from front upper control arm (1) and reposition the front wheel speed sensor harness (5).

Note: Support the lower control arm to prevent over-articulation of the front lower control arm ball joint.

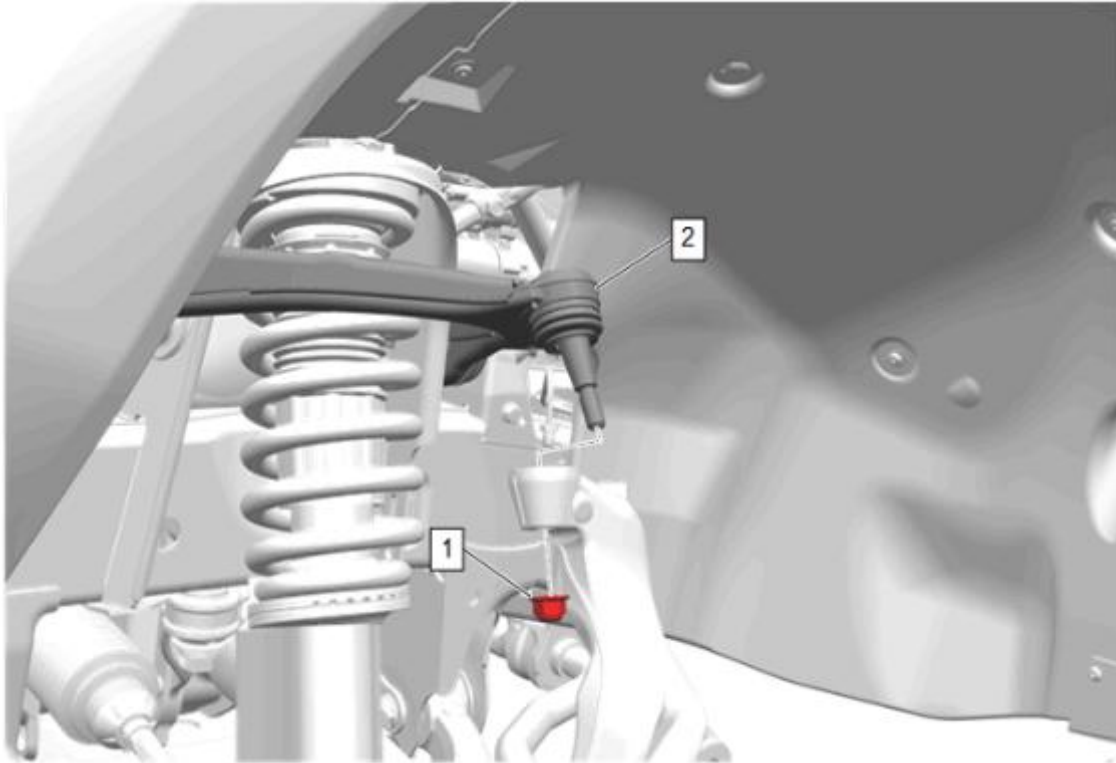
3. Support the lower control arm with a suitable jack stand.



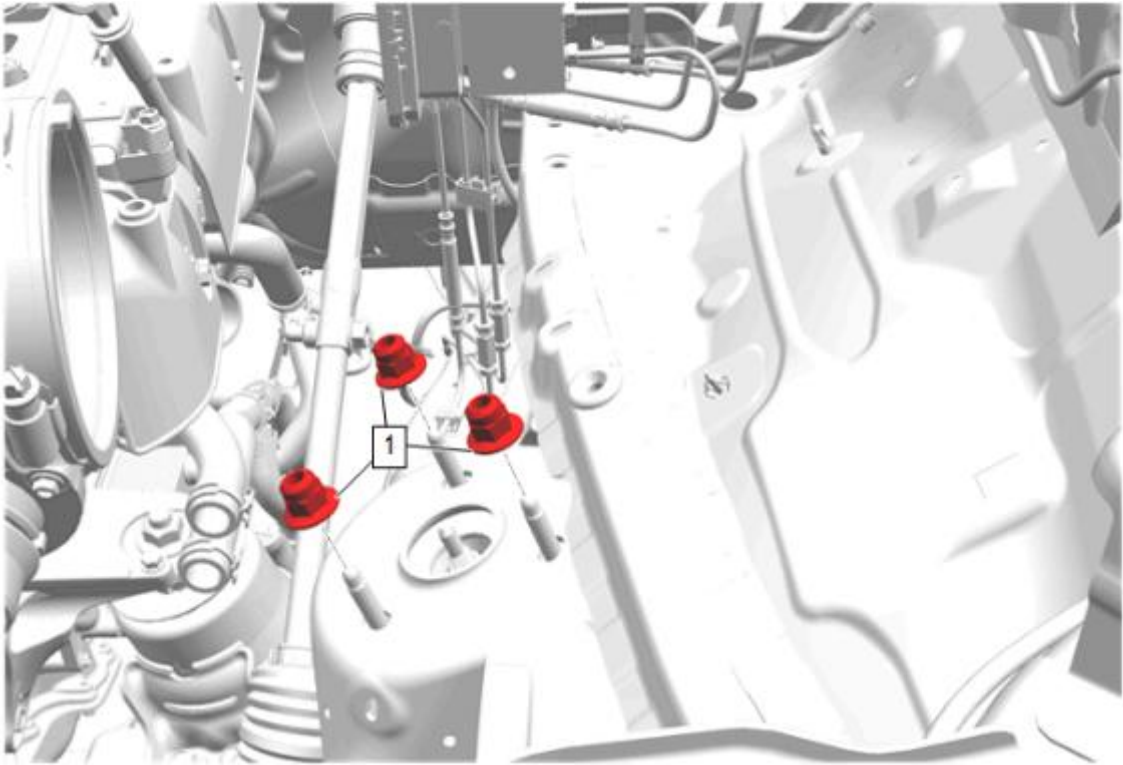
4. Front Upper Control Arm Ball Stud Nut (1) » Loosen



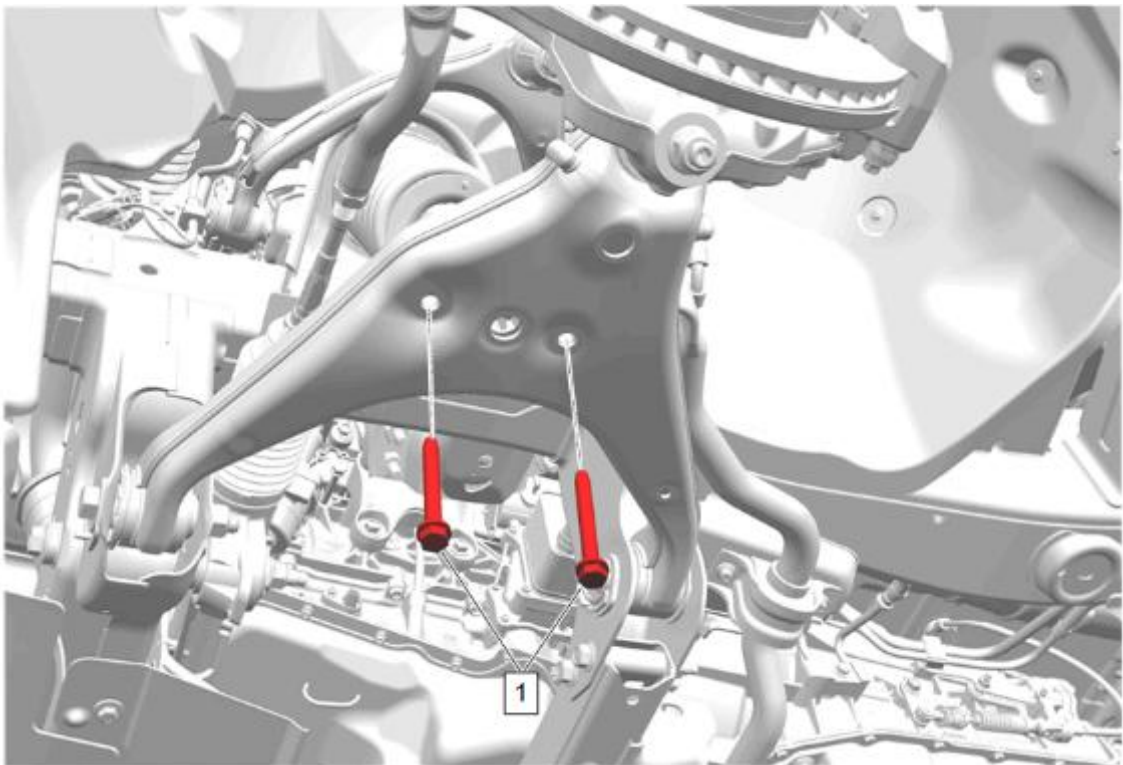
5. Using the *CH-42188-B* Ball Joint Separator (1), separate the left front upper control arm (2) from the steering knuckle.
6. Remove the *CH-42188-B* Ball Joint Separator (1) from the left front upper control arm (2) and the steering knuckle.



7. Front Upper Control Arm Ball Stud Nut (1) » Remove
8. Front Upper Control Arm (2) @ Steering Knuckle » Separate



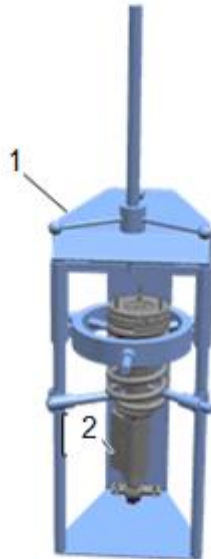
- 9. Disconnect the wiring harness retainers as necessary.
- 10. Front Suspension Shock Absorber Upper Mounting Nut (1) » Remove [3x]



11. Front Shock Absorber Bolt (1) » Remove [2x]



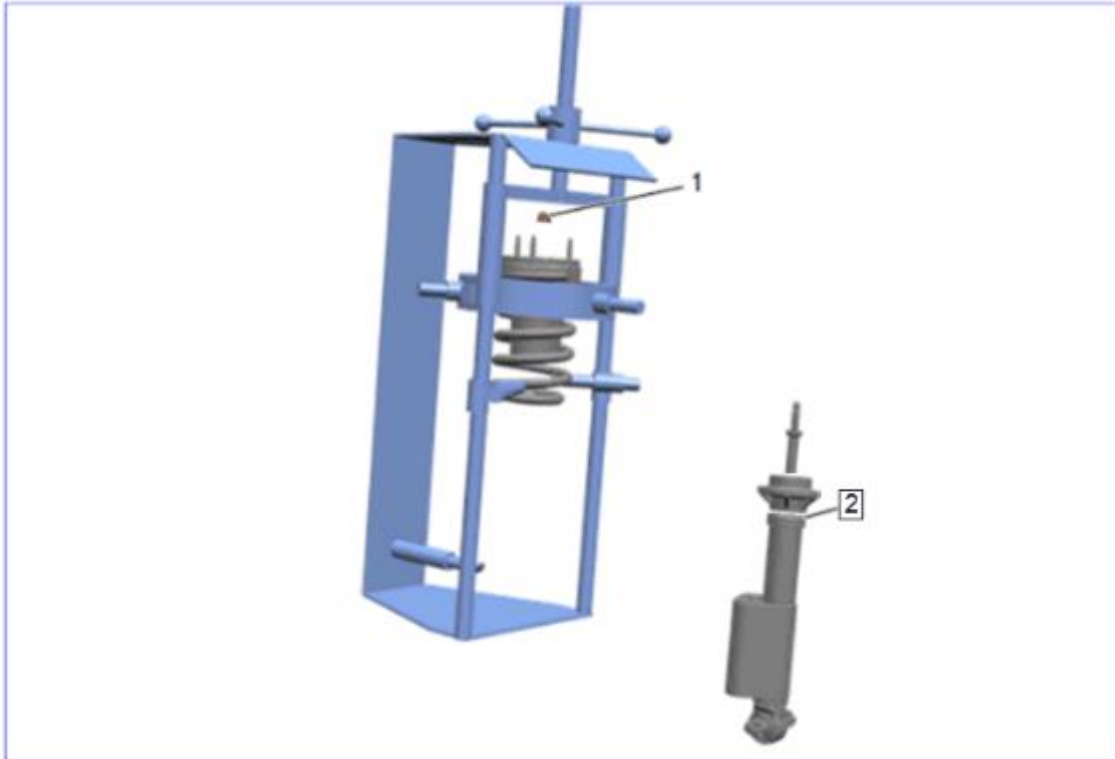
12. Front Shock Absorber and Spring Assembly (1) » Remove



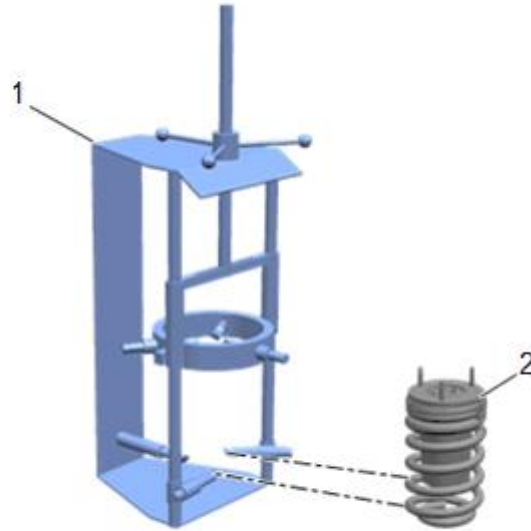
Warning: To prevent personal injury and/or component damage, use the proper tools to support and compress the coil spring prior to removal of the strut shaft nut when removing the coil spring. The coil spring is under extreme pressure and can become a projectile should the spring separate from the strut before all of the tension is relieved.

Note: ONLY use hand tools to perform the following service procedure.

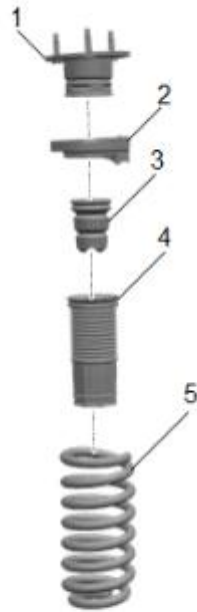
13. Place the front shock absorber and spring assembly (2) into the *CH-45400-B* Strut Spring Compressor (1) securing the two lower compressor arms to the front coil spring lower coils.
14. Using the *CH-45400-B* Strut Spring Compressor (1), compress the front coil spring enough to secure the front shock absorber and spring assembly in place.



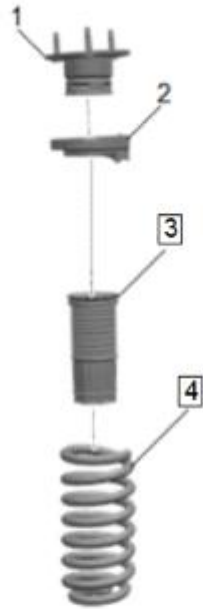
15. Front Shock Absorber Nut (1) » Remove
16. Front Shock Absorber (2) » Remove



17. Using the *CH-45400-B* Strut Spring Compressor (1), release tension on the front coil spring (2).
18. Remove the front coil spring (2) from the *CH-45400-B* Strut Spring Compressor (1).



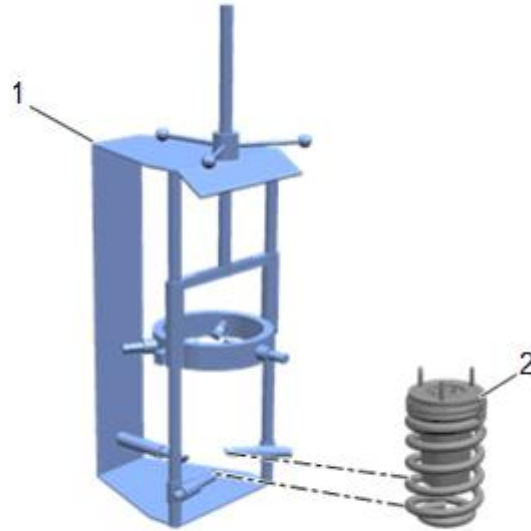
19. Front Shock Absorber Mount (1) @ Front Coil Spring (5) » Remove
20. Front Coil Spring Insulator (2) » Remove
21. Front Shock Absorber Upper Bumper (3) » Remove and discard.
22. Front Shock Absorber Boot (4) » Remove



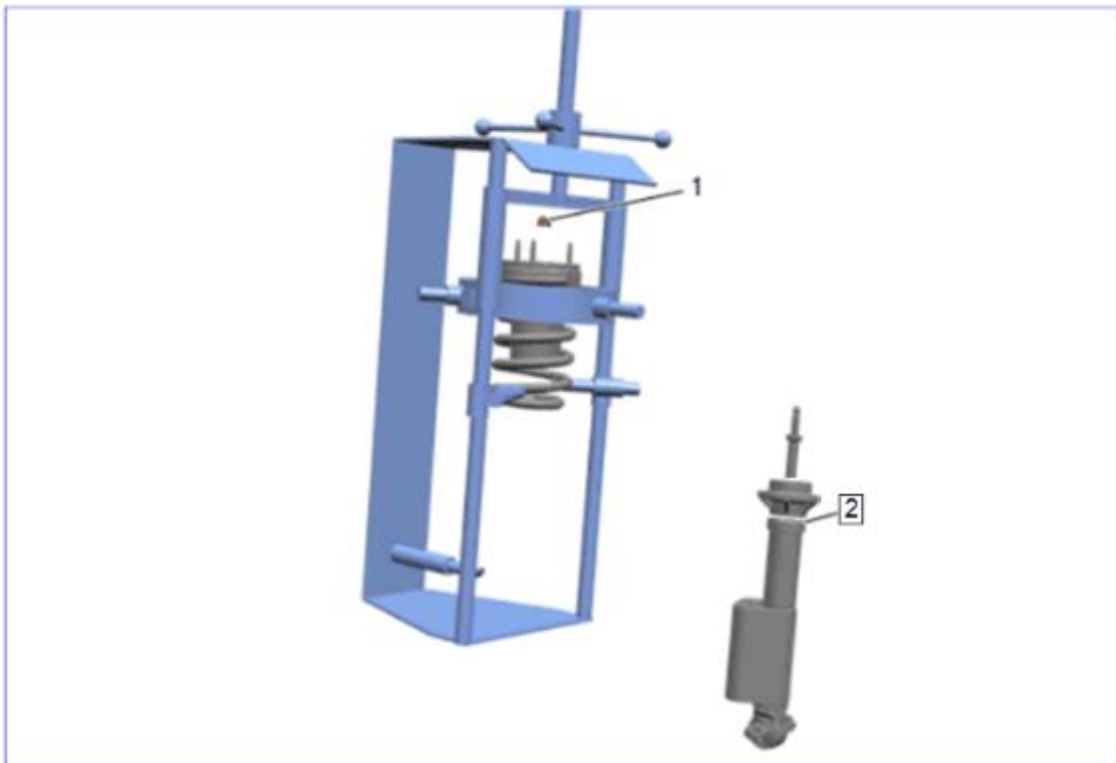
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23. Front Shock Absorber Boot (3) » Install
24. Front Coil Spring Insulator (2) » Install
25. Front Shock Absorber Mount (1) @ Front Coil Spring (4) » Install



- 26. Install the front coil spring (2) to the *CH-45400-B* Strut Spring Compressor (1).
- 27. Using the *CH-45400-B* Strut Spring Compressor (1), apply tension on the front coil spring (2).

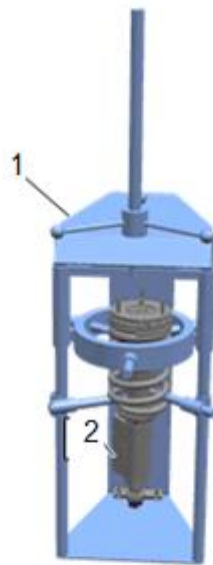


28. Front Shock Absorber (2) » Install

29. Adjust the *CH-45400-B* Strut Spring Compressor as necessary so enough of the threaded portion of the front shock absorber rod is exposed.

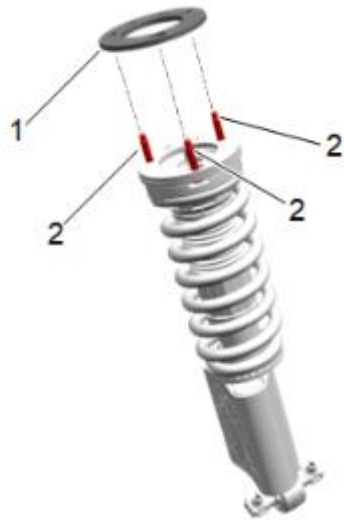
Caution: Use the correct fastener in the correct location. Replacement fasteners must be the correct part number for that application. Fasteners requiring replacement or fasteners requiring the use of thread locking compound or sealant are identified in the service procedure. Do not use paints, lubricants, or corrosion inhibitors on fasteners or fastener joint surfaces unless specified. These coatings affect fastener torque and joint clamping force and may damage the fastener. Use the correct tightening sequence and specifications when installing fasteners in order to avoid damage to parts and systems.

30. Front Shock Absorber Nut (1) » Install and tighten to 68 N.m (50 lb ft) —



31. Using the *CH-45400-B* Strut Spring Compressor (1), release all tension on the front coil spring and the front shock absorber mount.

32. Remove the front shock absorber and spring assembly (2) from the *CH-45400-B* Strut Spring Compressor (1).

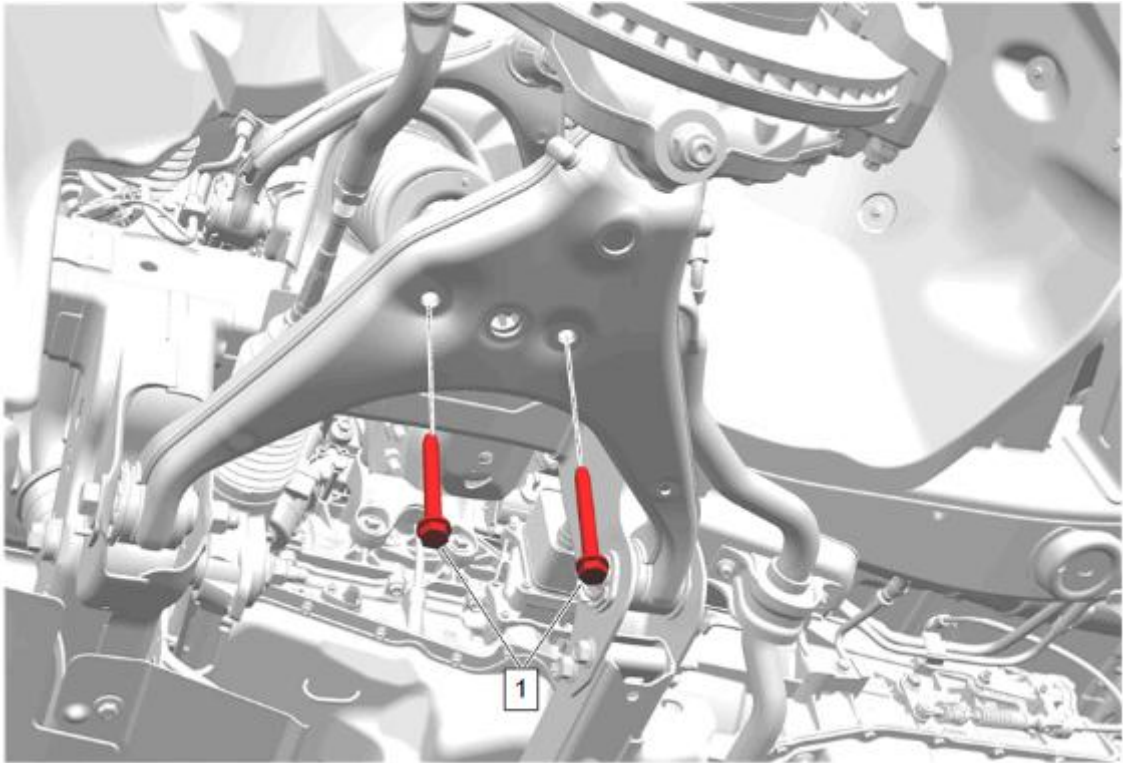


Warning: Do not install this spacer on Canyon AEV edition vehicles, as this spacer is already equipped on Canyon AEV edition vehicles. Continue to step 42 for Canyon AEV edition vehicles.

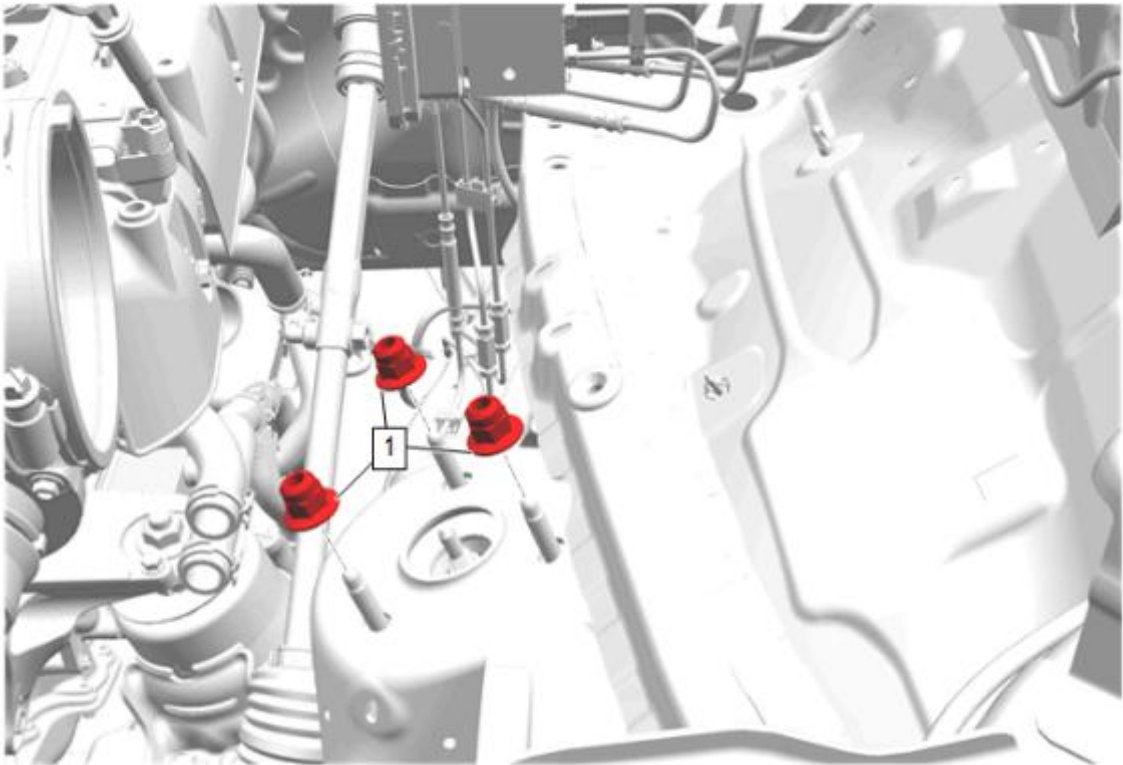
33. Install the front shock spacer (1) over the front shock studs (2).



34. Front Shock Absorber and Spring Assembly (1) » Install

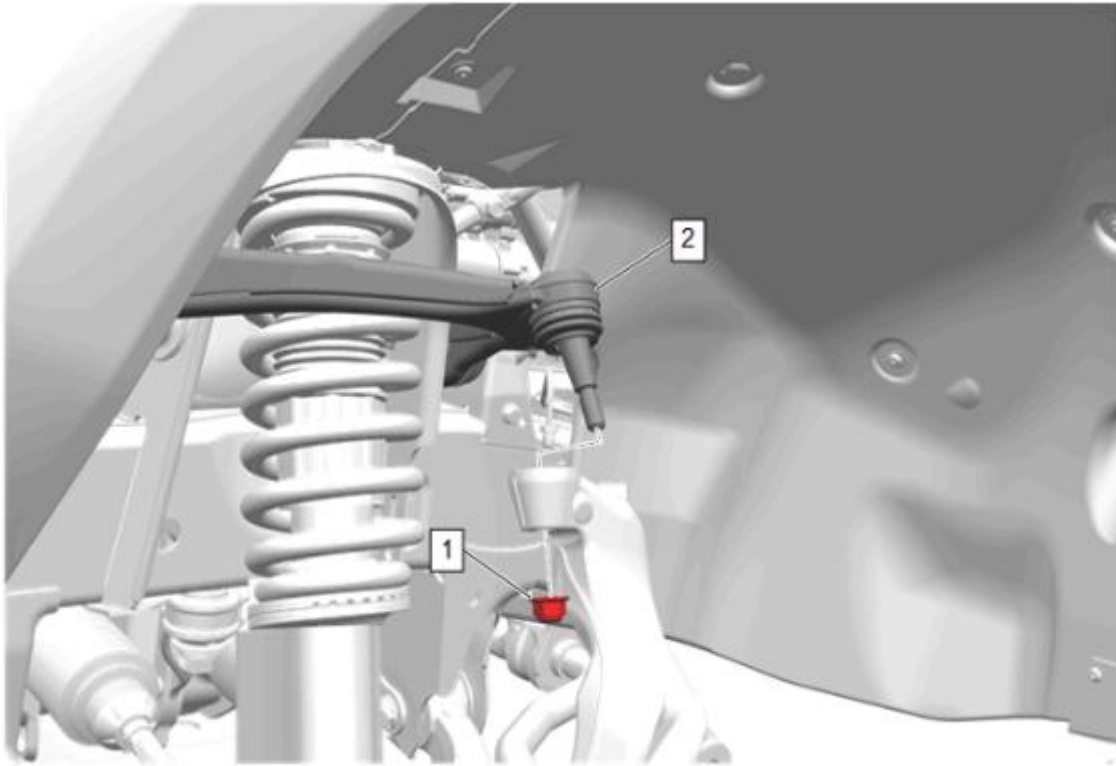


35. Front Shock Absorber Bolt (1) » Install and tighten Tighten to 50 N.m (37 lb ft).



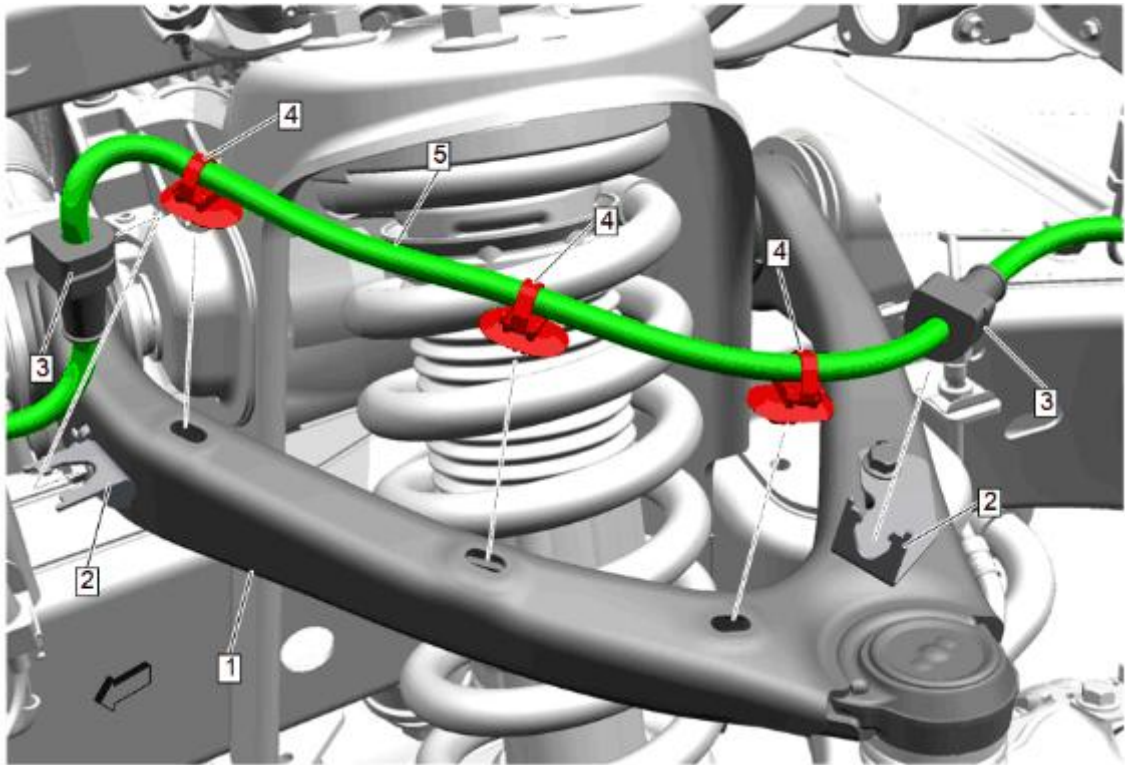
36. Front Suspension Shock Absorber Upper Mounting Nut (1) » Install and tighten — Tighten to 58 N.m (43 lb ft).

37. Connect the wiring harness retainers as necessary.



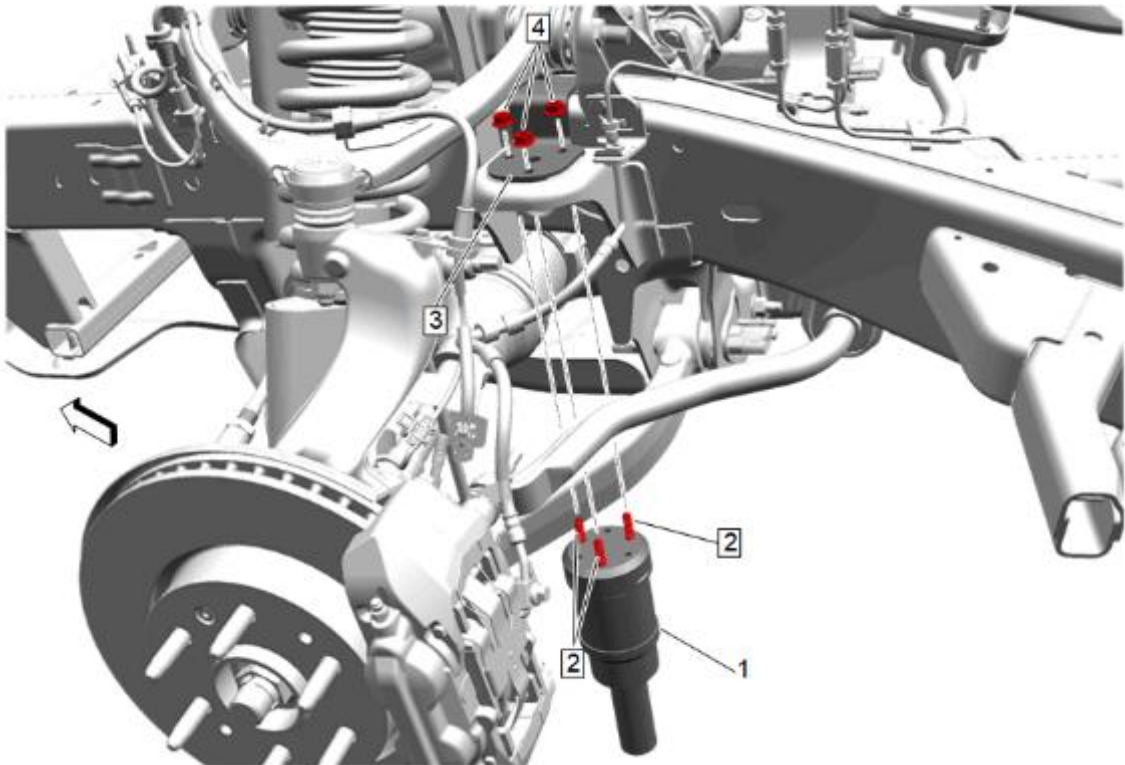
38. Front Upper Control Arm (2) » @ Steering Knuckle Install

39. Front Upper Control Arm Ball Stud Nut (1) » Install and tighten — First Pass: 40 N.m (30 lb ft), Final Pass: 60 - 75 degrees.



40. Reposition the front wheel speed sensor harness (5) and engage the retainers (4) to front upper control arm (1).

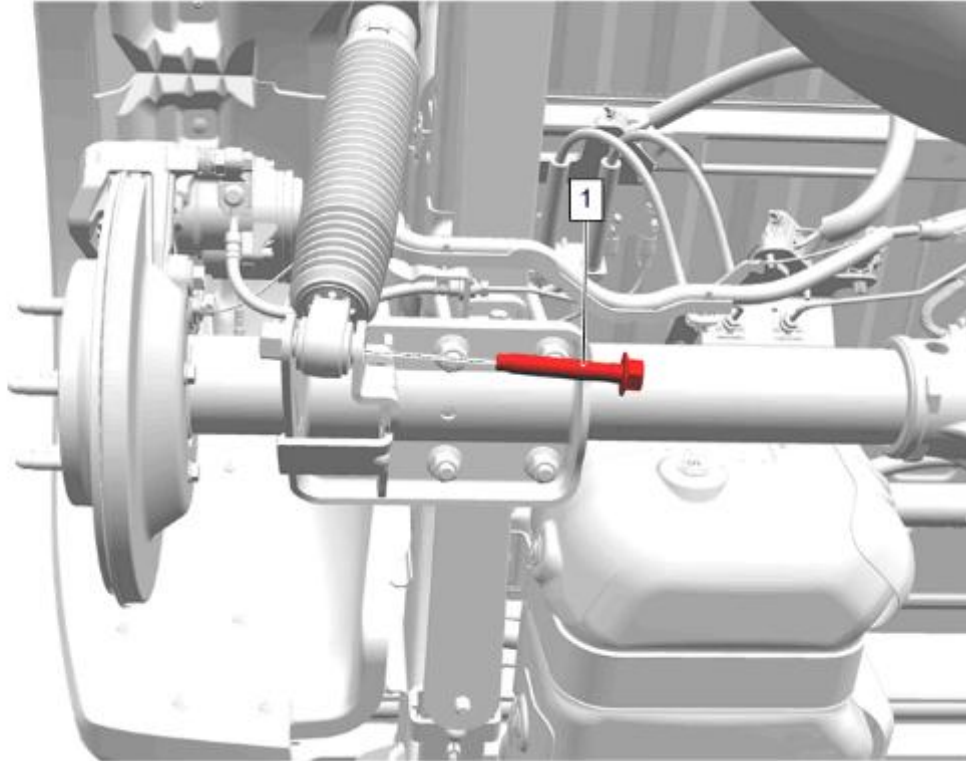
41. Engage the front wheel speed sensor harness grommets (3) to the brackets (2).



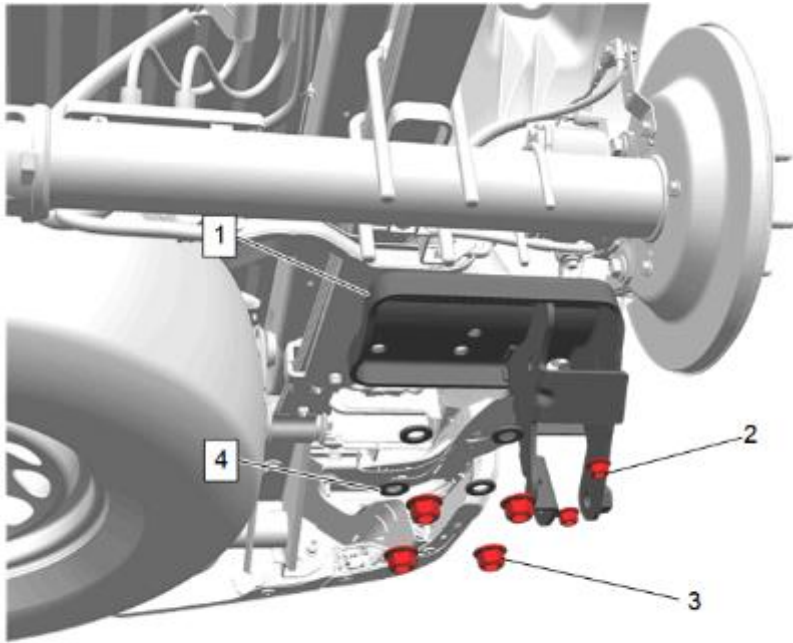
42. Position the front jounce shock (1) to the vehicle by aligning the studs (2) to the frame bracket holes (3). Install the supplied M8 nuts (4) to studs and tighten to 22 N.m (16 lb ft).
43. Repeat steps 1 through 42 for opposite side.

Rear Jounce Shock

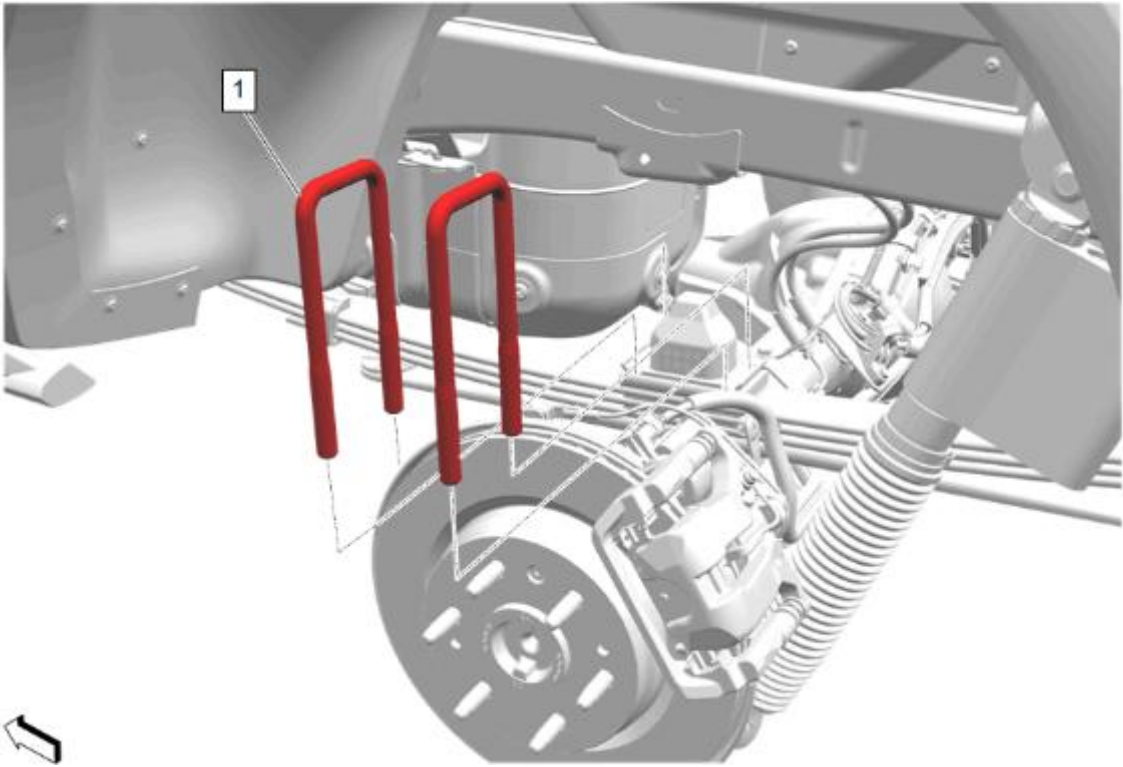
1. Support the rear axle assembly with the proper jack stand.



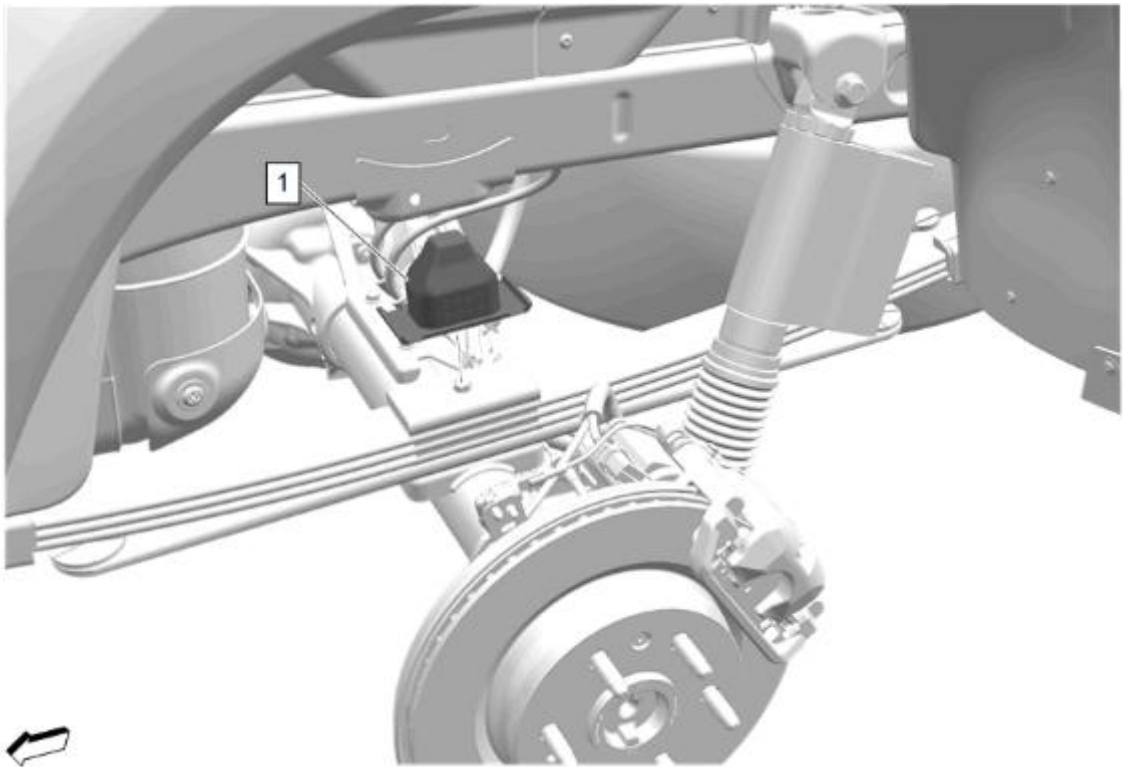
2. Rear Shock Absorber Bolt (1) » Remove



3. Rear Small U Bolt Nut (2) » Remove [2x]
4. Rear Spring Unit Bolt Nut (3) » Remove [4x]
5. Rear Spring Unit Bolt Washer (4) » Remove [4x]
6. Rear Spring Anchor Plate (1) » Remove



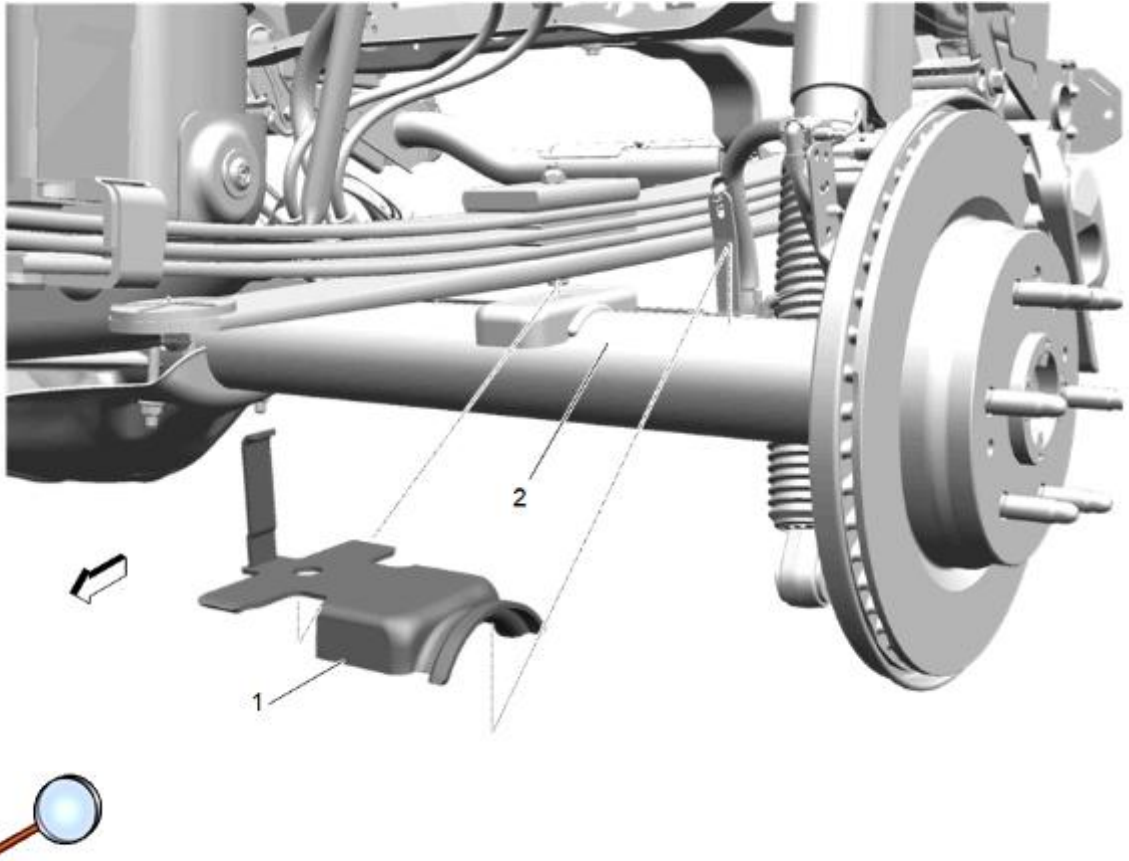
Note: Do not discard the smaller outer U-Bolt.
7. Remove and discard rear spring U-Bolts (1).



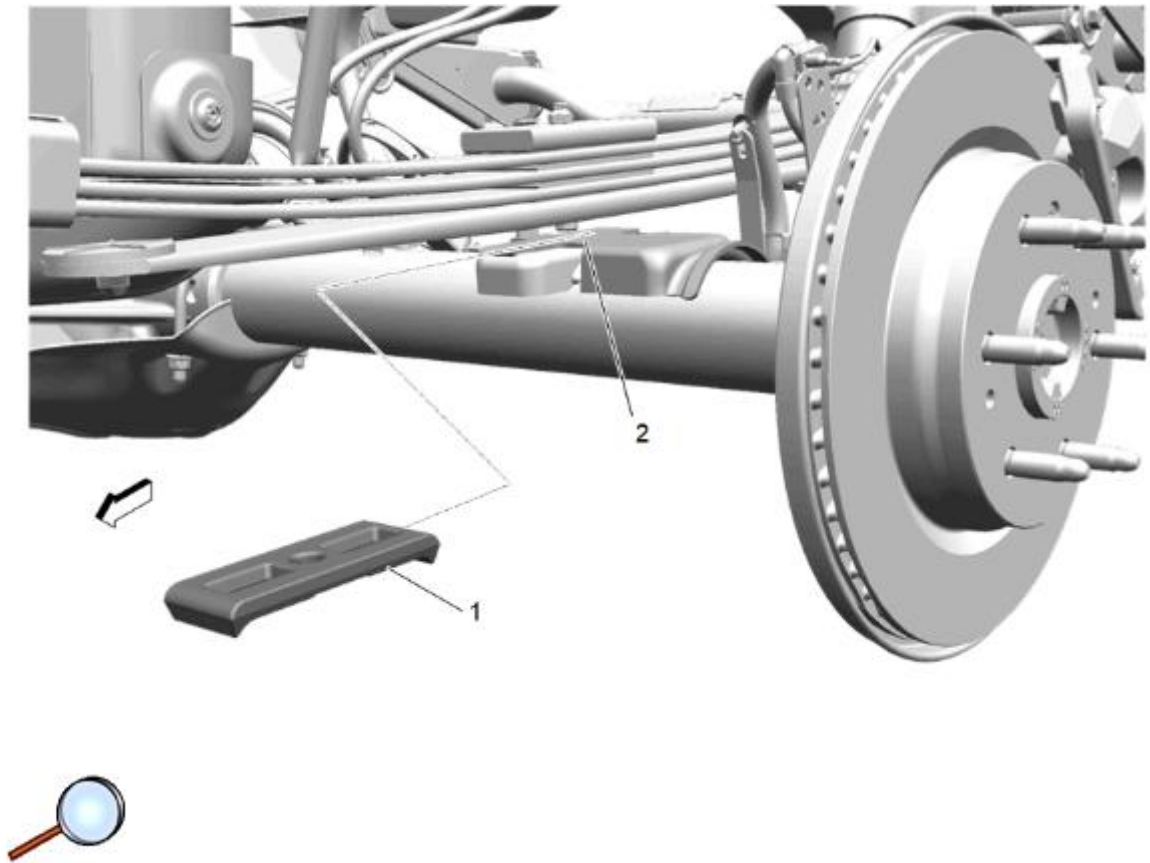
8. Remove and discard rear axle bumper (1).

9. Installing Rear Spacer and Rear Jounce Bumper Stop for Accessory Kit P/N 85017322:

Note: Steps 9.1 to 9.3 apply to Accessory Kit P/N 85017322 only. If using Accessory Kit P/N 85095698 please move onto step#10



9.1. Install the rear jounce bumper stop (1) to the rear axle (2) making sure hole is centered with leaf spring guide pin .



Note: If the vehicle is equipped with AEV edition Canyon continue to step 9.3, as step 9.2 does not apply to AEV edition Canyon vehicles.

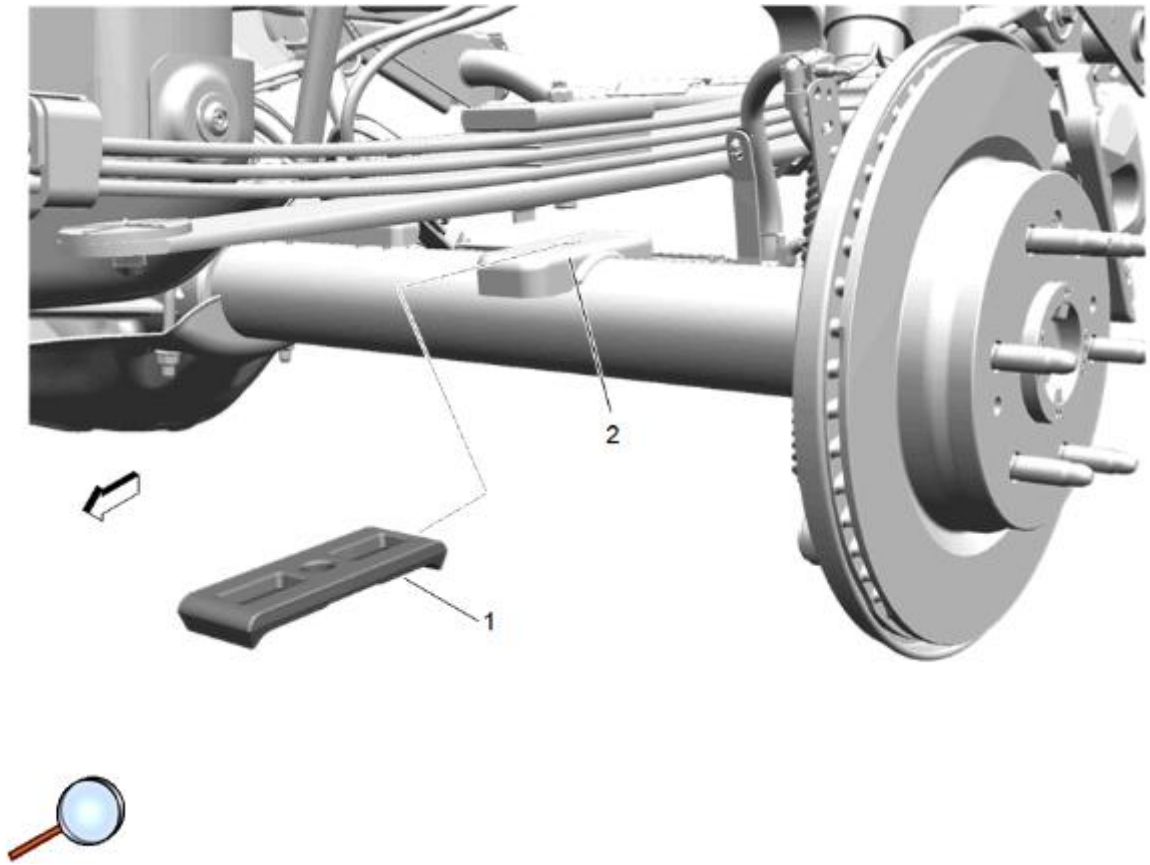
Warning: Do not install this spacer on Canyon AEV edition vehicles, as this spacer is already equipped on Canyon AEV edition vehicles. Continue to step 9.3 for Canyon AEV edition vehicles.

9.2. Install rear spacer (1) onto the rear jounce bumper stop (2) making sure hole is centered with leaf spring guide pin.

9.3. Raise the rear axle until it touches the leaf spring and applies light compression to the leaf spring. Continue to step 11.

10. **Installing Rear Spacer and Rear Jounce Bumper Stop for Accessory Kit P/N 85095698:**

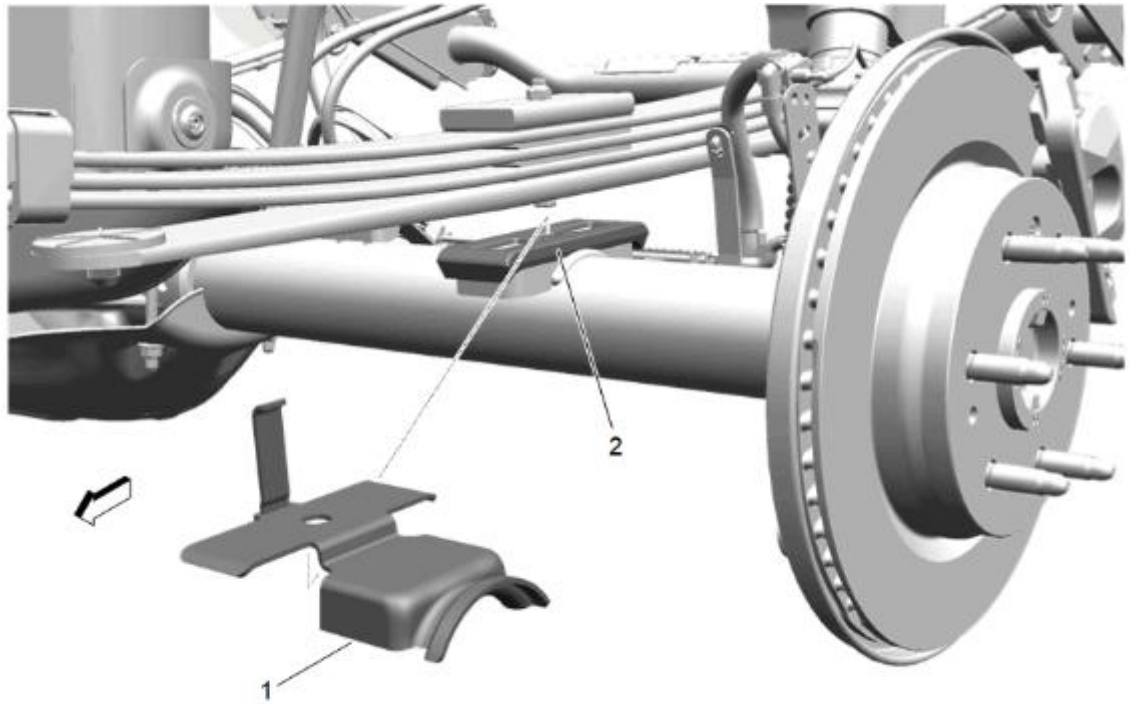
Note: Steps 10.1 to 10.3 apply to Accessory Kit P/N 85095698 only. If using Accessory Kit P/N 85017322 please move onto step 9.



Note: If the vehicle is equipped with AEV edition Canyon continue to step 10.2, as step 10.1 does not apply to AEV edition Canyon vehicles.

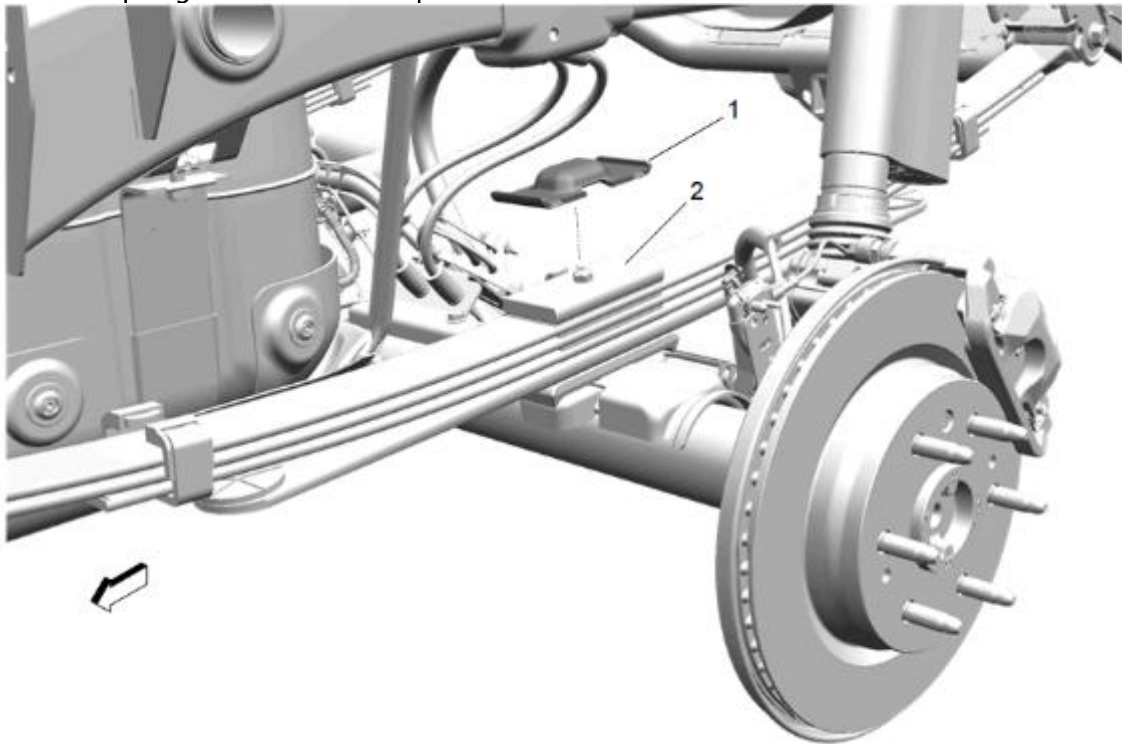
Warning: Do not install this spacer on Canyon AEV edition vehicles, as this spacer is already equipped on Canyon AEV edition vehicles. Continue to step 10.2 for Canyon AEV edition vehicles.

10.1. Install rear spacer (1) onto the rear axle (2) making sure hole is centered with leaf spring guide pin.

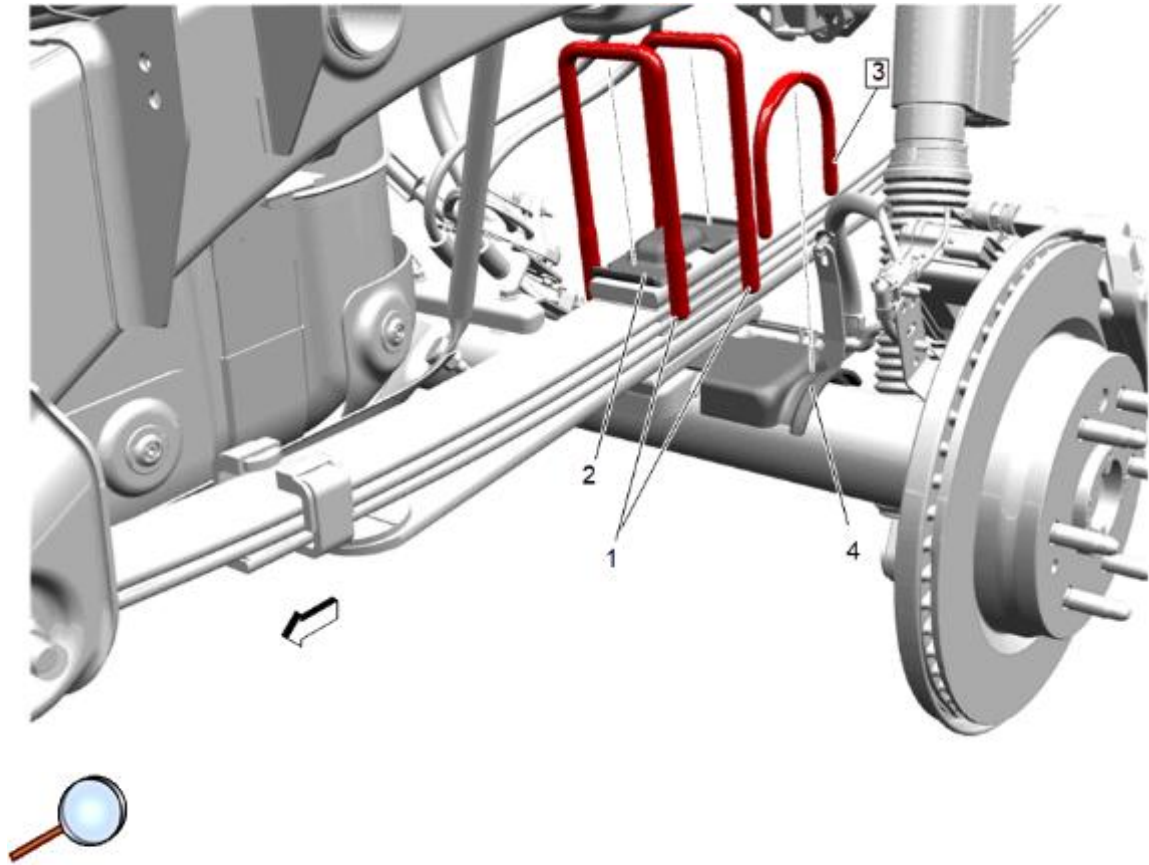


10.2. Install the rear jounce bumper stop (1) to the rear spacer (2) making sure hole is centered with leaf spring guide pin .

10.3. Raise the rear axle until it touches the leaf spring and applies light compression to the leaf spring. Continue to step 11.

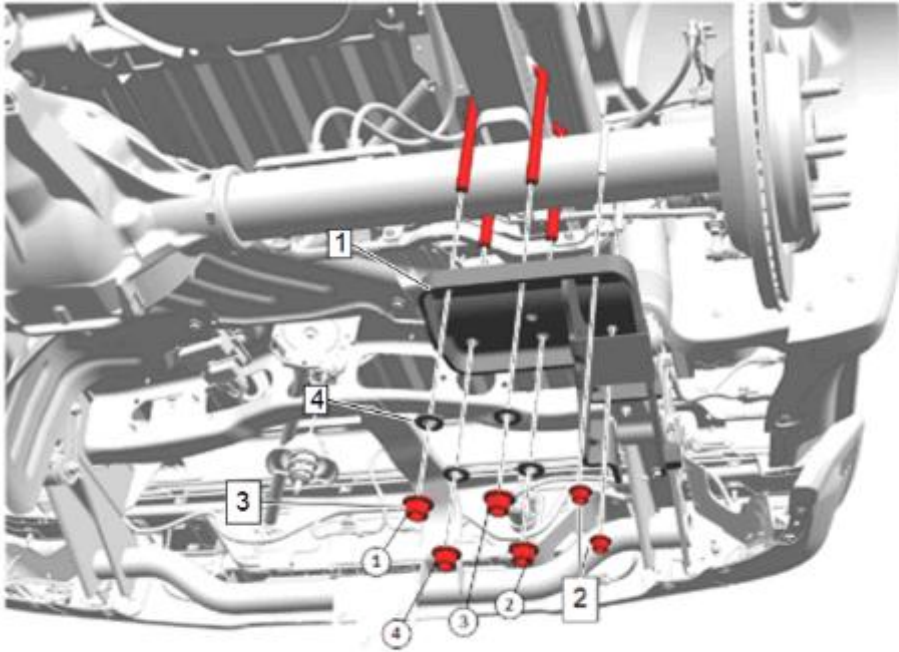


11. Install the rear jounce plate (1) to the rear leaf spring (2).

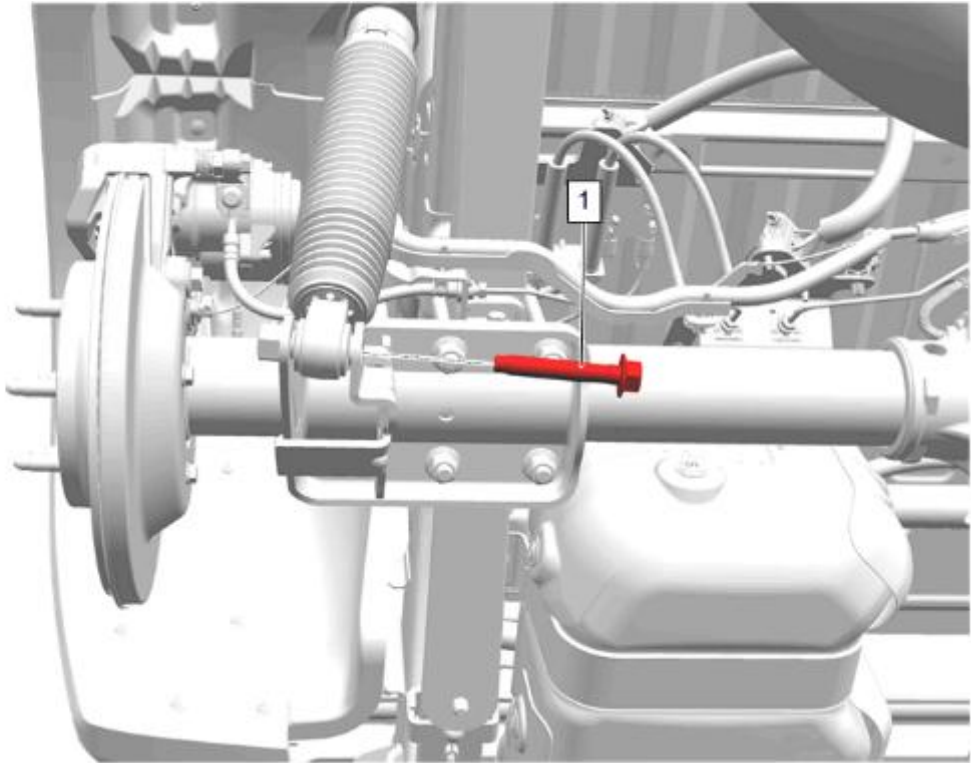


12. Install the NEW U-bolts (1) to jounce plate (2) over leaf spring.

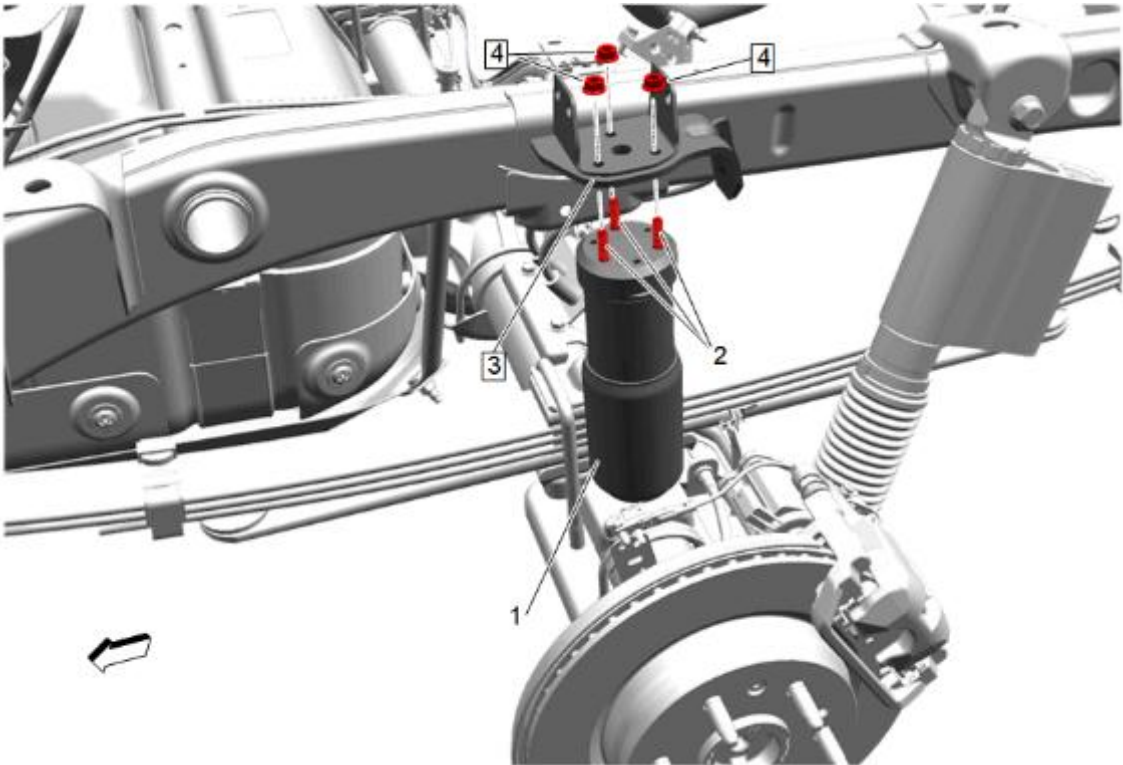
13. install previously retained outer U-bolt (3) to rear jounce bumper stop (4) over rear axle.



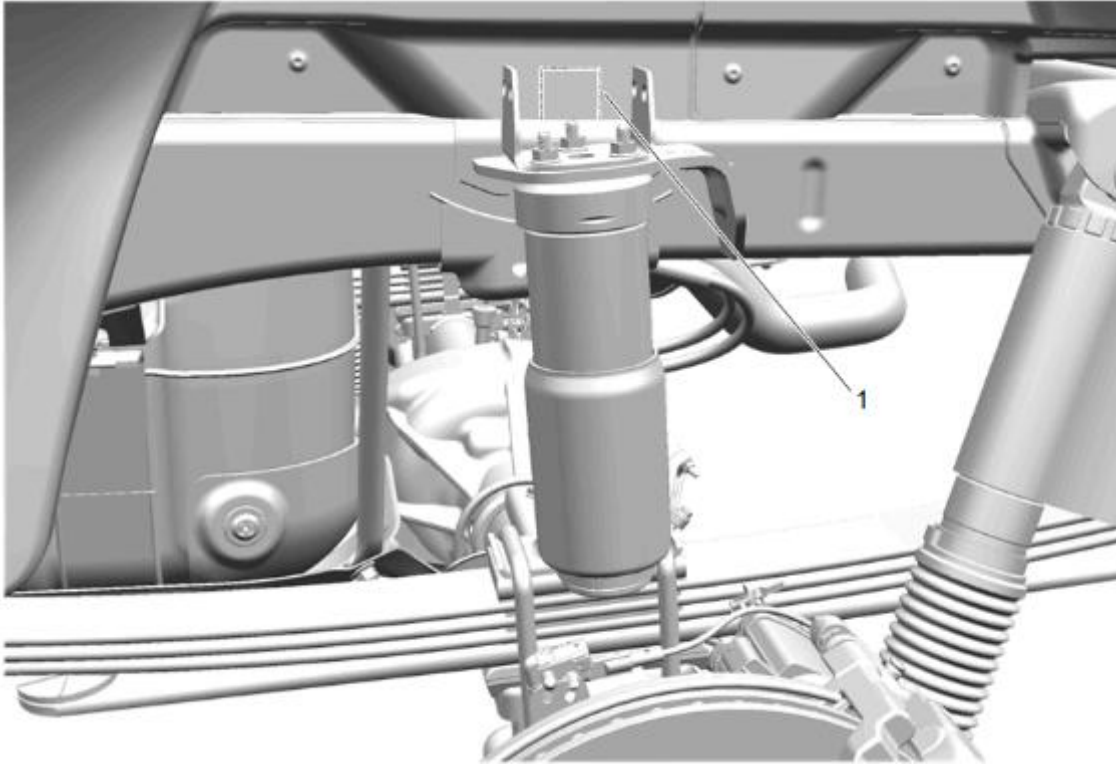
14. Rear Spring Anchor Plate (1) » Install
15. Rear Spring Unit Bolt Washer (4) » Install [4x]
16. Rear Spring Unit Bolt Nut (3) » Install and tighten in sequence [4x] —
17. Tighten the U-bolt nuts (3) in sequence 1-4 to:
 - 17.1. First Pass: **80 N•m (59 lb ft)**
 - 17.2. Second Pass: **Loosen 180 degrees**
 - 17.3. Third Pass: **80 N•m (59 lb ft)**
 - 17.4. Final Pass: **125–135 degrees**
18. Rear Small U Bolt Nut (2) » Install and tighten [2x] — Tighten nut to 35 N.m (26 lb ft).



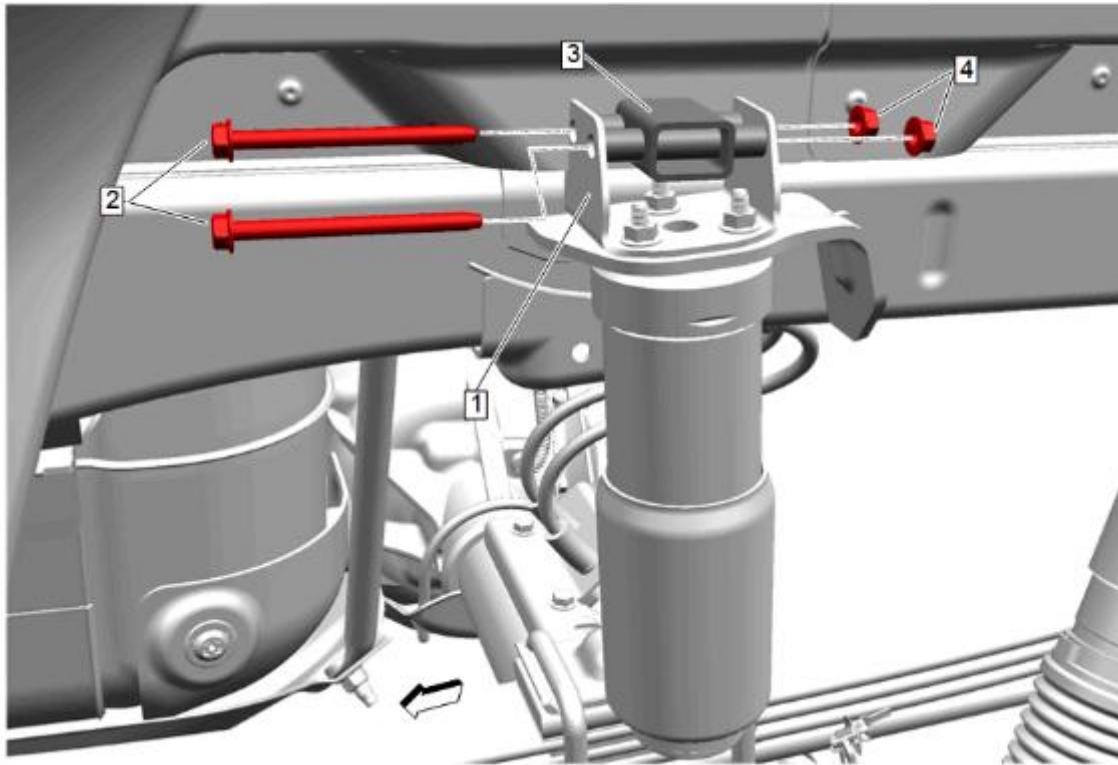
19. Rear Shock Absorber Bolt (1) » Install and tighten — Tighten bolt to 160 N.m (118 lb ft).
20. Remove the jack stand from the rear axle assembly.
21. Repeat steps 1 through 20 for opposite side.



22. Position the rear jounce shock (1) to the vehicle by aligning the studs (2) to the frame bracket holes (3). Install the supplied M8 nuts (4) to studs and tighten to 22 N.m (16 lb ft).



23. Trim rear wheelhouse liner at cutouts along dotted lines (1) to create an opening above the frame rail.
24. Repeat steps 22 and 23 for opposite side.



25. Slide cross brace (3) in place between bed and frame from RH side.
26. Secure cross brace (3) to bracket uprights with supplied M8 bolts (2) and M8 nuts (4). Tighten nuts to 22 N.m (16 lb ft).
27. Repeat step 26 for opposite side.
28. Install the front and rear wheel and tire assemblies. Refer to [Tire and Wheel Removal and Installation](#) in Vehicle Service Manual.
29. Lower the vehicle.
30. Measure the front wheel alignment and adjust to ZR2/Bison Specifications. Refer to [Wheel Alignment Specifications](#) in Vehicle Service Manual.
31. After 500 miles of driving, check torque on U-bolts and re-torque as necessary.