

Front Lower Control Arm Replacement (4WD, SRW)

Single Use Fasteners and Components

- Front Lower Control Arm Bolt [2x]
- Front Wheel Drive Shaft Nut

Special Tools

- *CH-43631* Ball Joint Separator
- *J-45851* Ball Joint Separator Protector Adapters
- *CH-48809* Torsion Bar Unloading/Loading

Equivalent regional tools: [Special Tools](#)

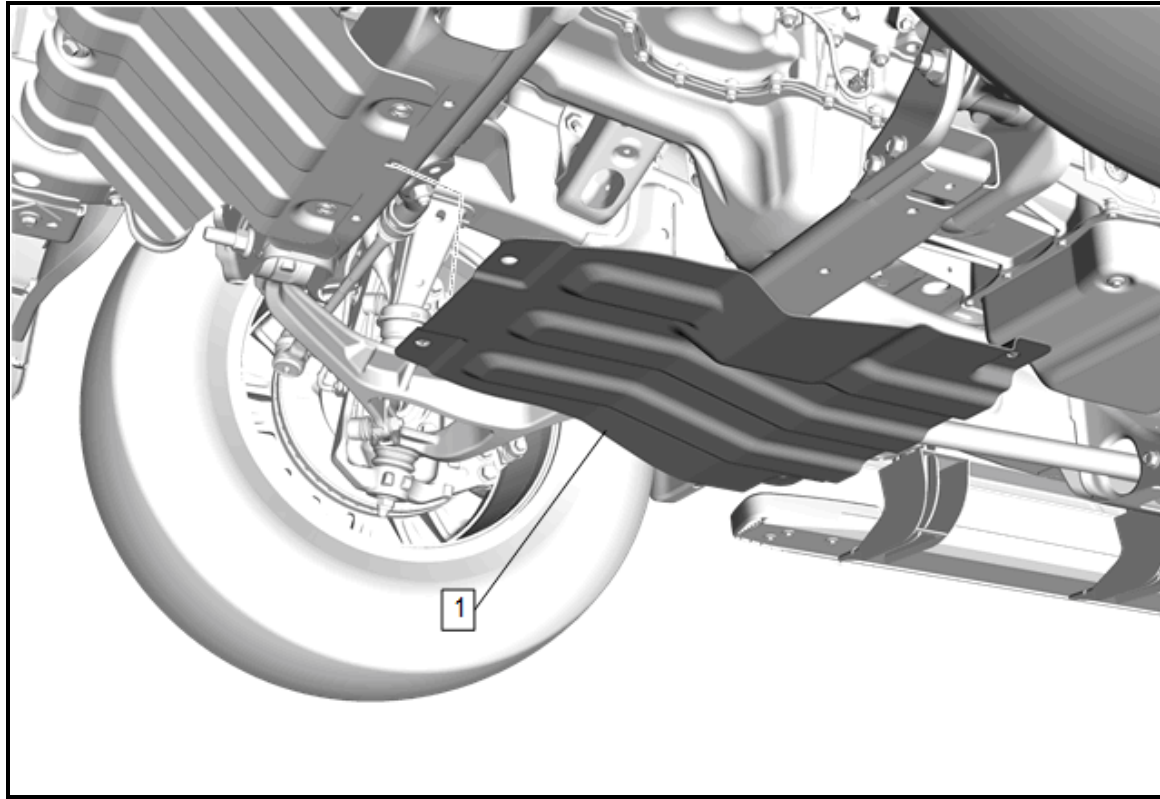
Caution: Use care when handling the torsion bars in order to avoid chipping or scratching the coating. Damage to the coating will result in premature failure of the torsion bars.

Note:

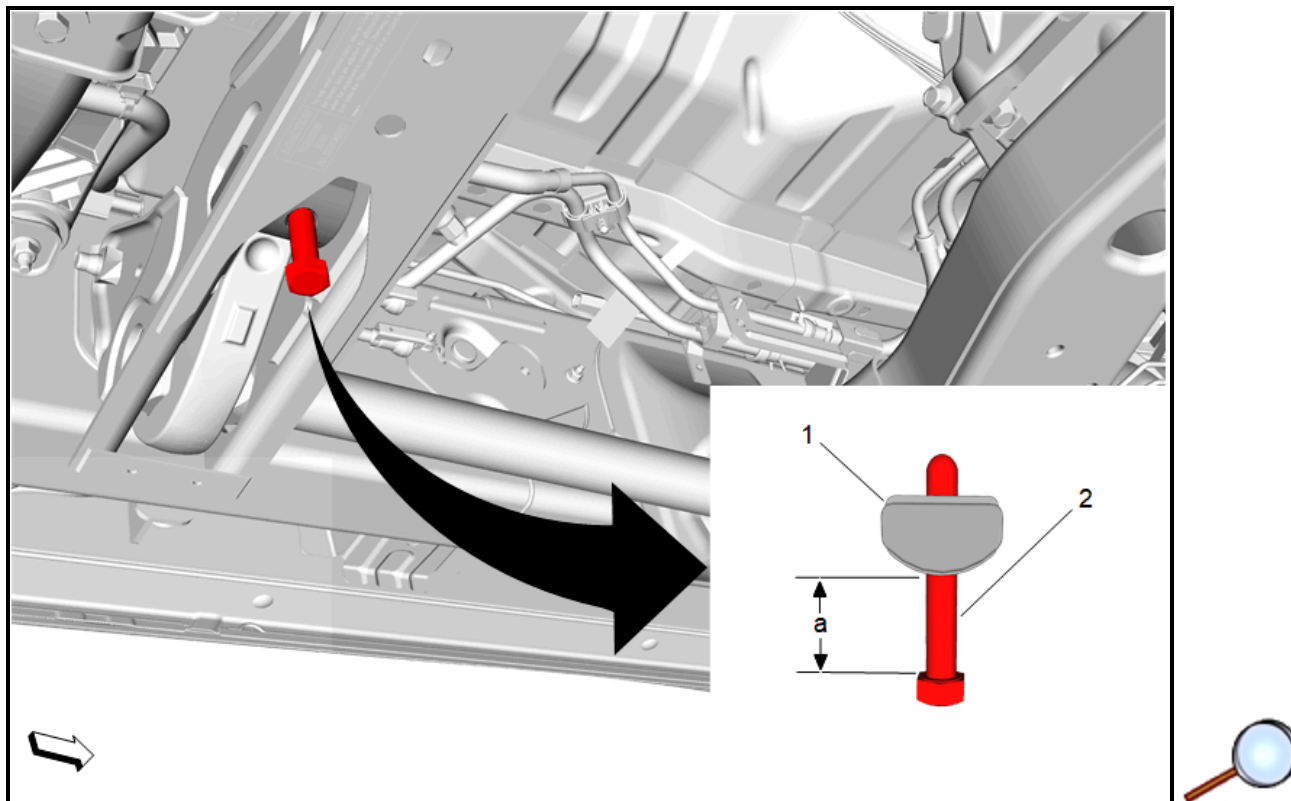
- When lifting the vehicle to service the front torsion bars or related components, Do NOT lift the vehicle by the front suspension.
- Use the appropriate hoist to lift the vehicle by the frame.
- The left and right torsion bars are NOT interchangeable.
- Ensure a NEW torsion bar is installed in the same direction as the OLD torsion bar.
- The torsion bars are only designed to be torqued in one direction.
- The correct direction for each torsion bar is marked on the bar.

Removal Procedure

1. Remove the front tire and wheel assembly. [Tire and Wheel Removal and Installation](#)



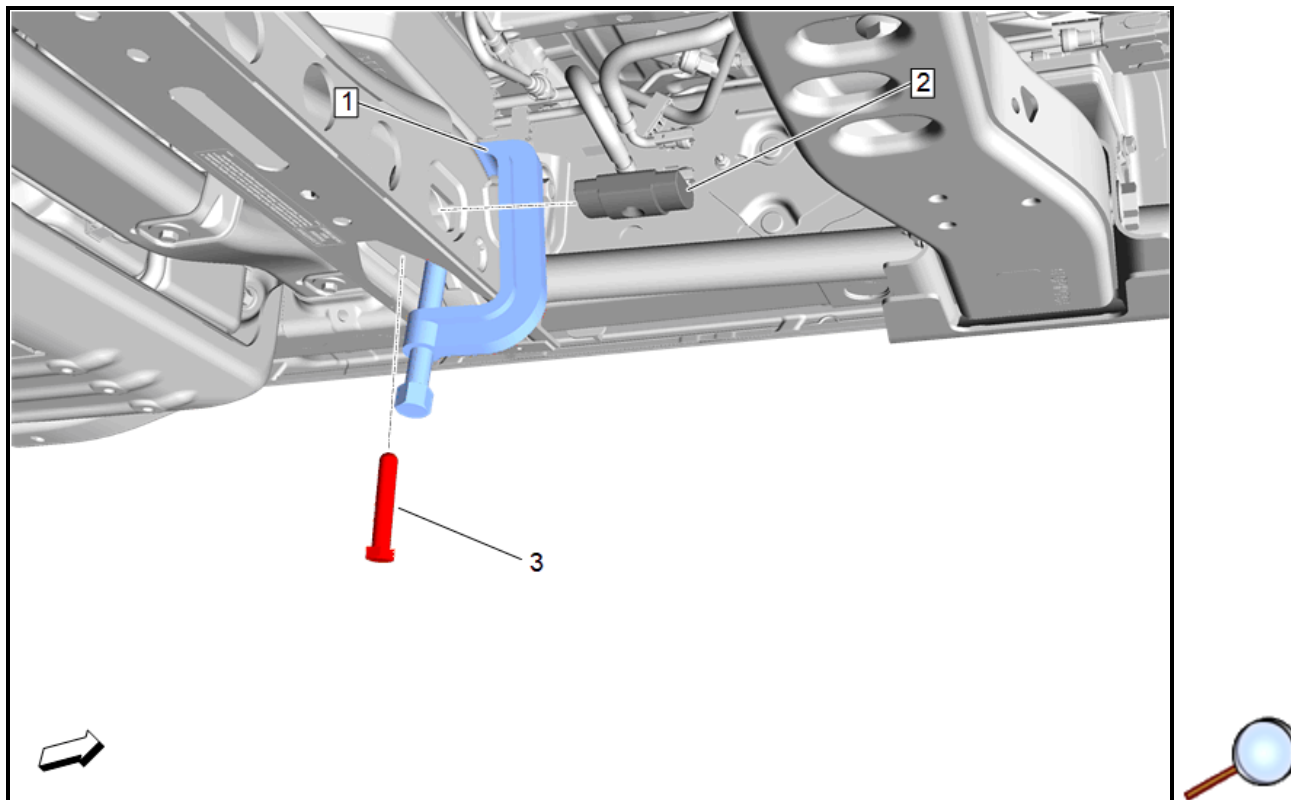
2. Underbody Skid Shield (1) » Remove — [Underbody Skid Shield Replacement](#)



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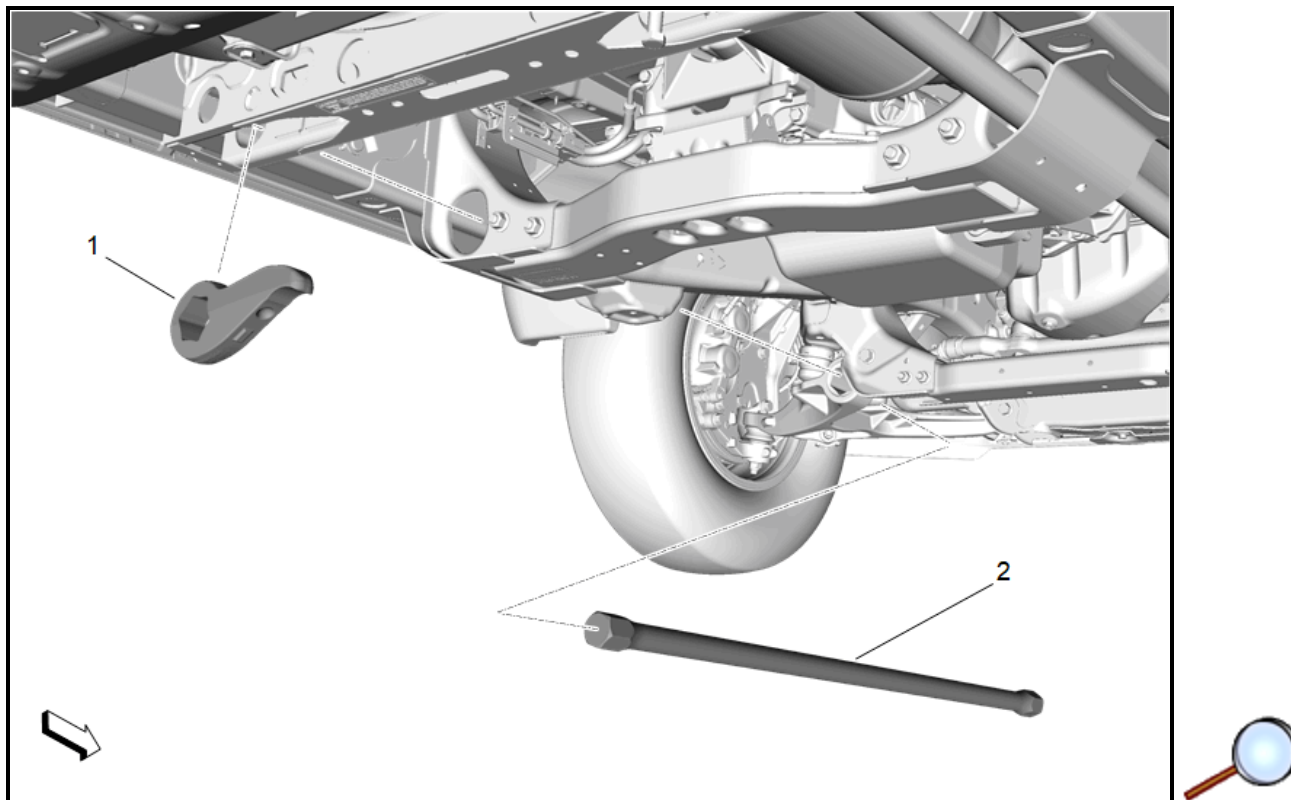
Note: This measurement step **MUST** be performed before removing or loosening any components or the measurement will be inaccurate.

3. Measure and record the distance (a) between the torsion bar adjust nuts (1) and the head of the torsion bar adjust bolts (2).

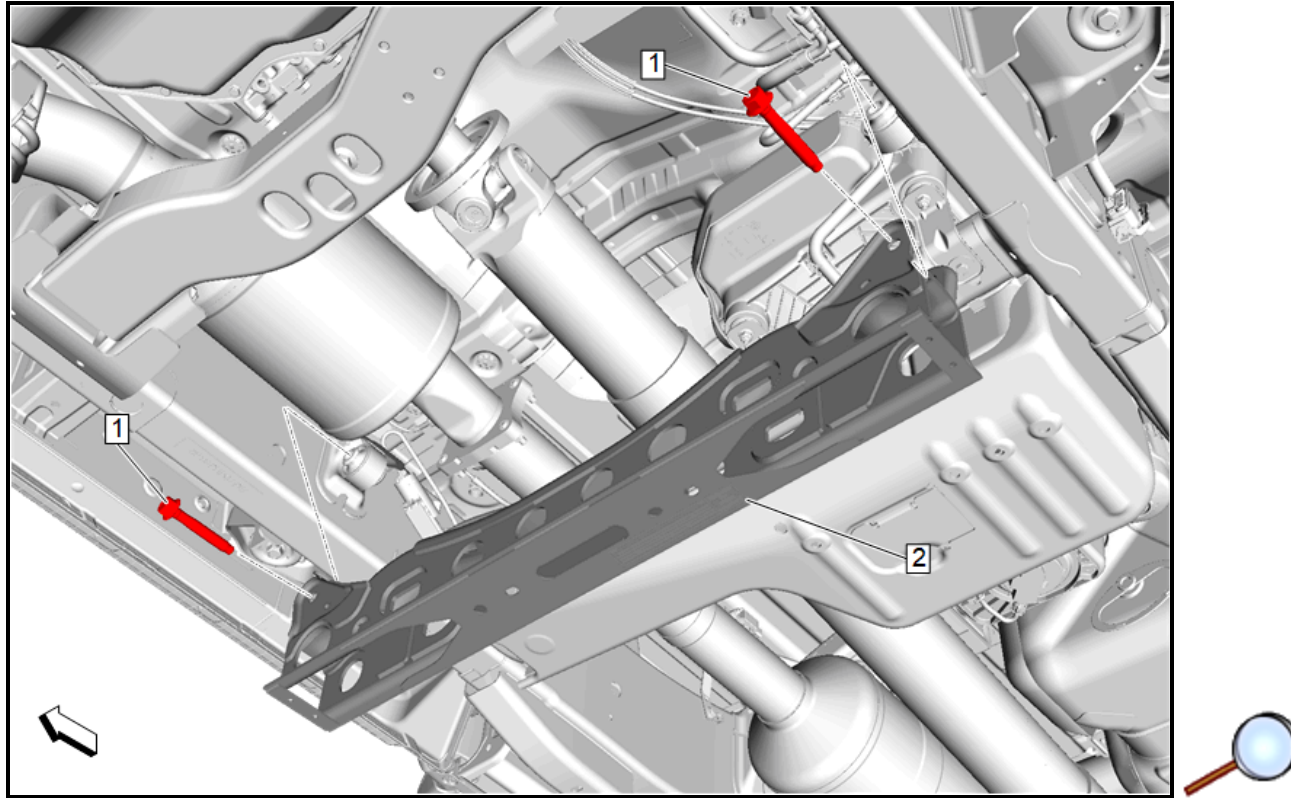


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4. Install the *CH-48809* Torsion Bar Unloading/Loading (1) and apply tension to the left and right torsion bar adjust arms until the load is removed from the torsion bar adjust nuts (2).
5. Remove the torsion bar adjust bolts (3) from the torsion bar adjust nuts (2).
6. Slide the torsion bar adjust nuts (2) out of the torsion bar support.
7. Release tension on the front torsion bars and remove the *CH-48809* Torsion Bar Unloading/Loading (1) from the torsion bar support.

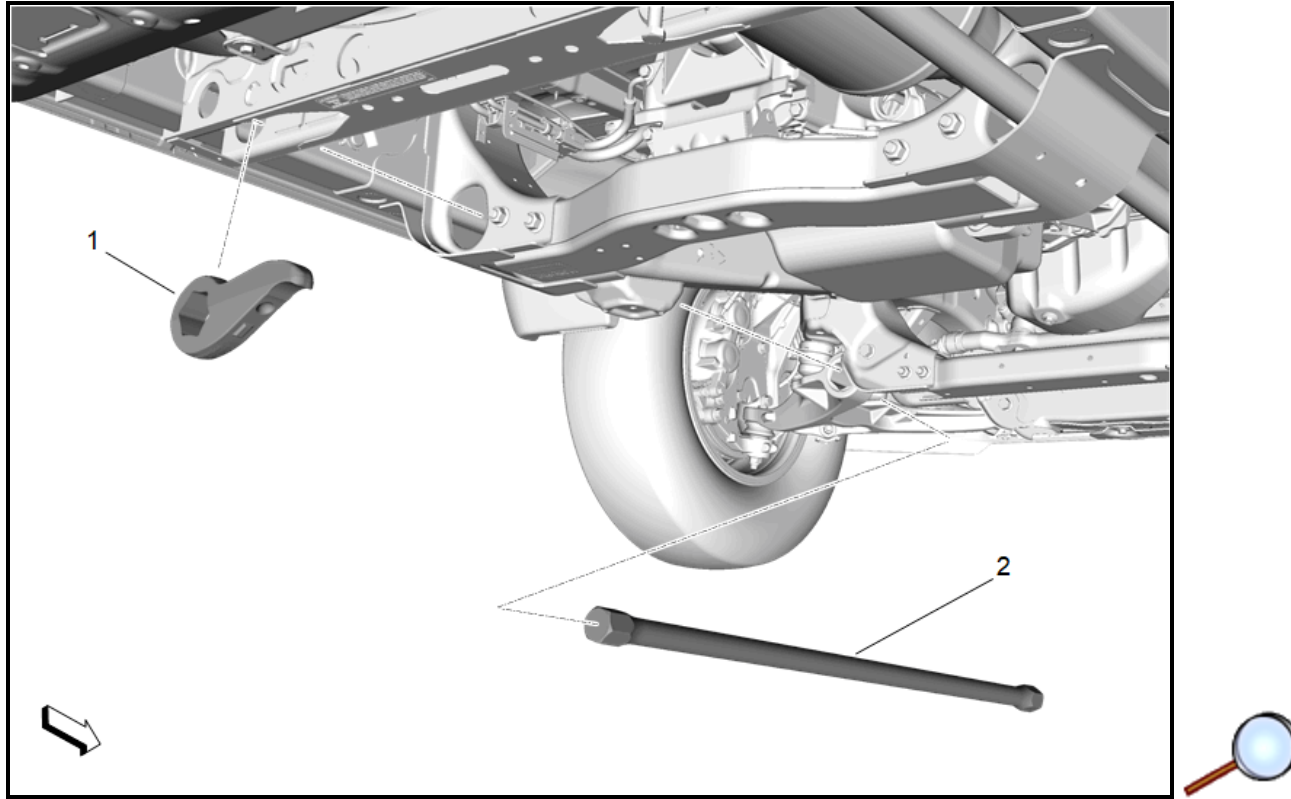


8. Slide the front torsion bars (2) forward and remove the torsion bar adjust arms (1).

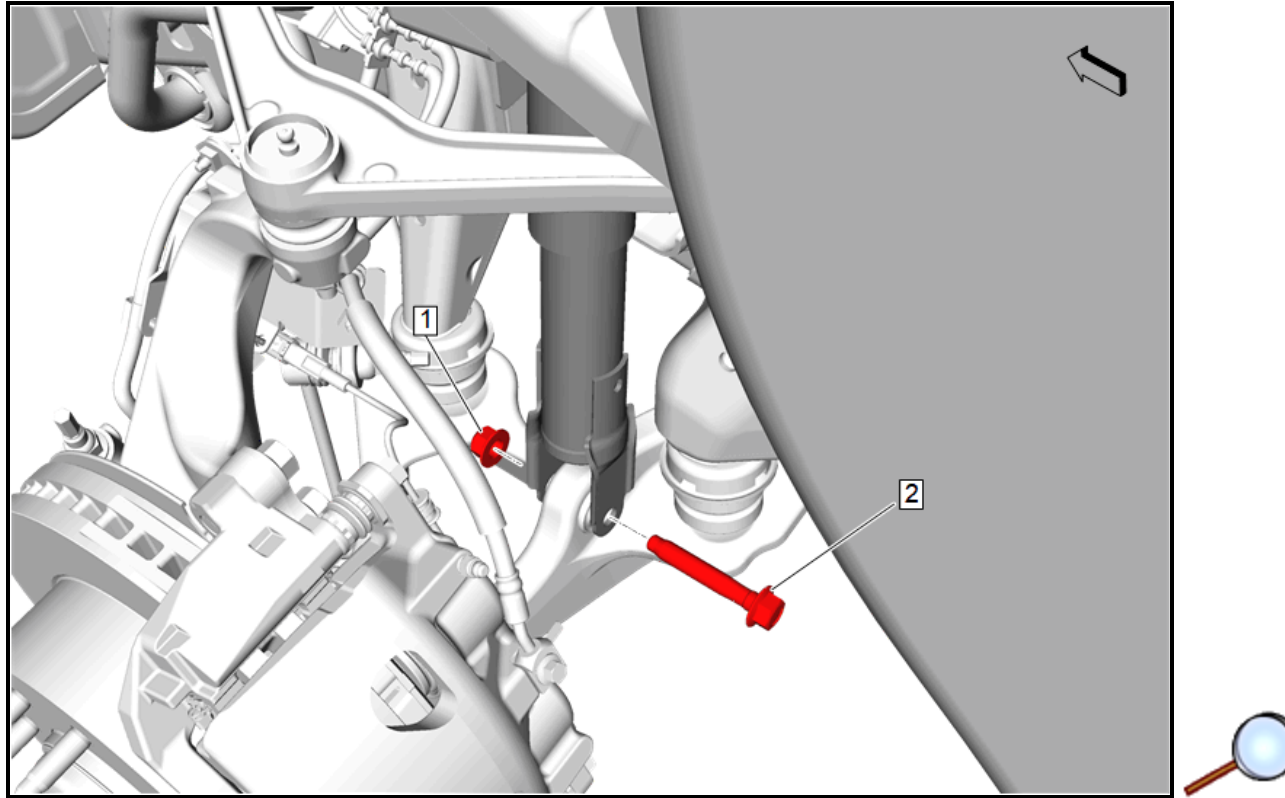


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9. Torsion Bar Support Bolt (1) » Remove [2x]
10. Torsion Bar Support (2) » Remove

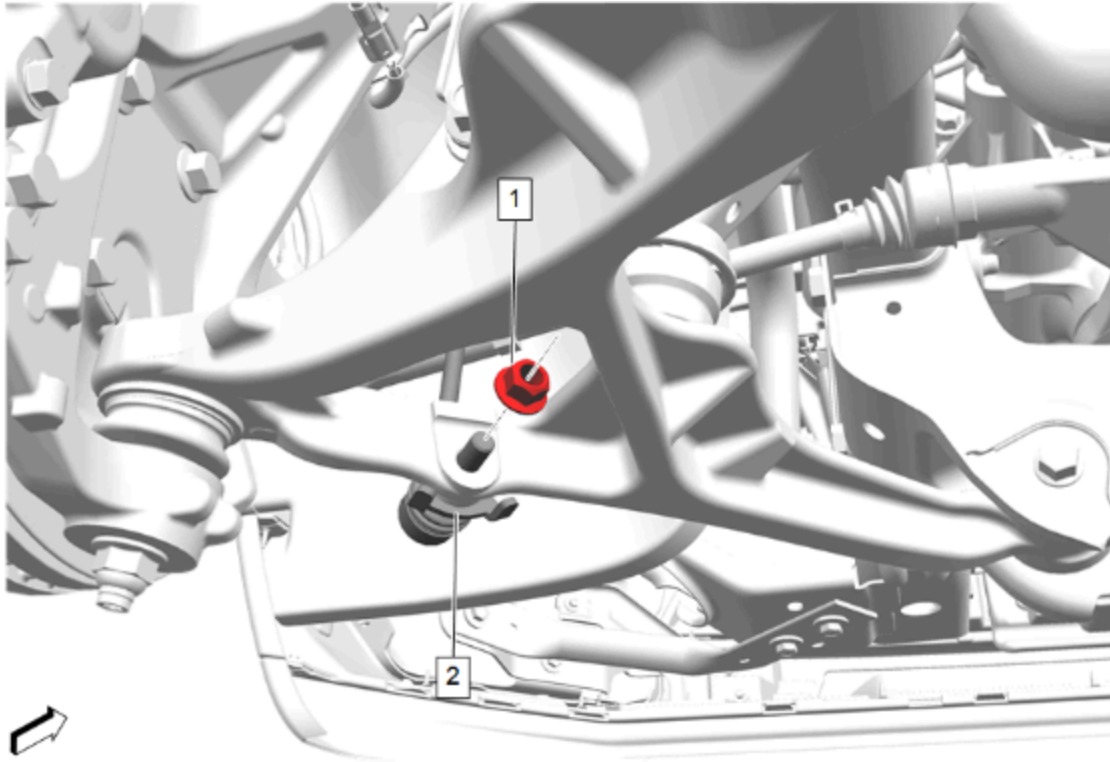


11. Slide the front torsion bar (2) rearward manipulating it through the frame to remove it from the vehicle.



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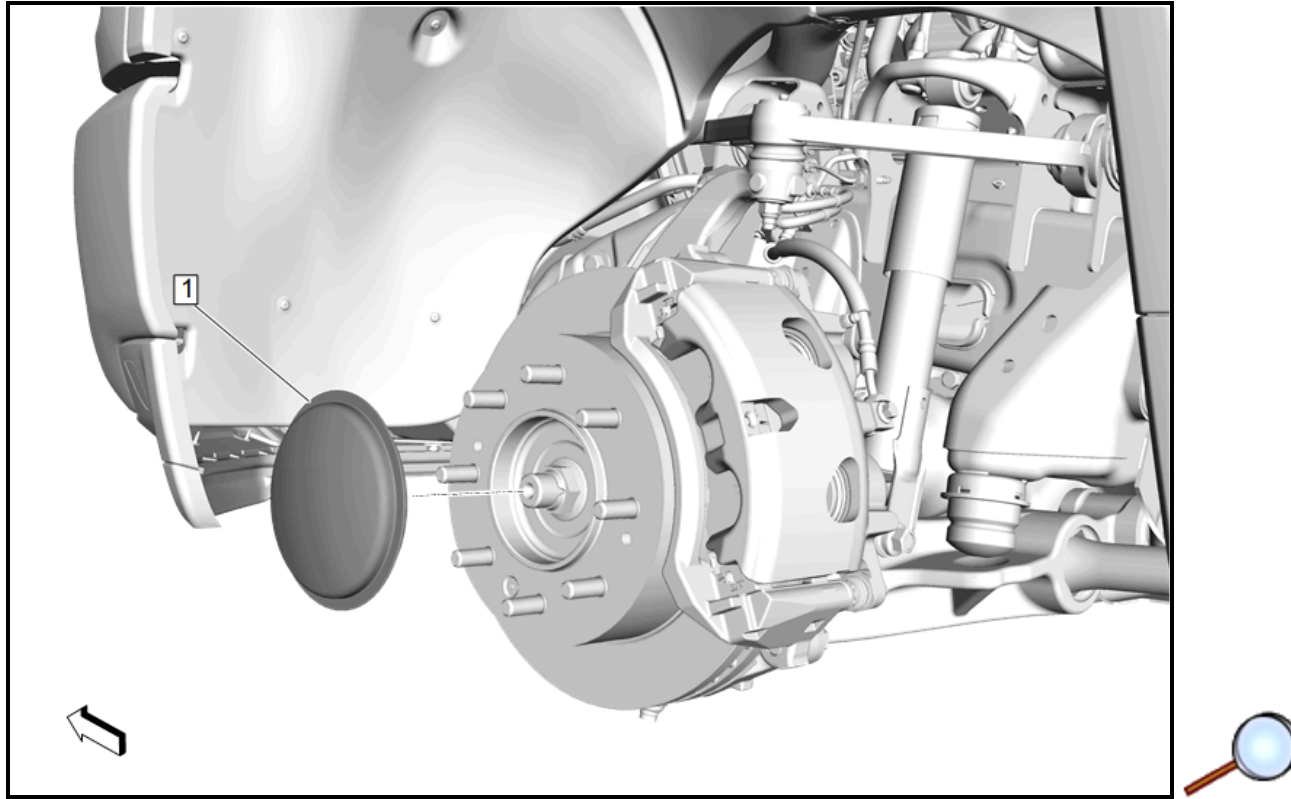
12. Front Shock Absorber Nut - Lower (1) » Remove
13. Front Shock Absorber Bolt (2) » Remove



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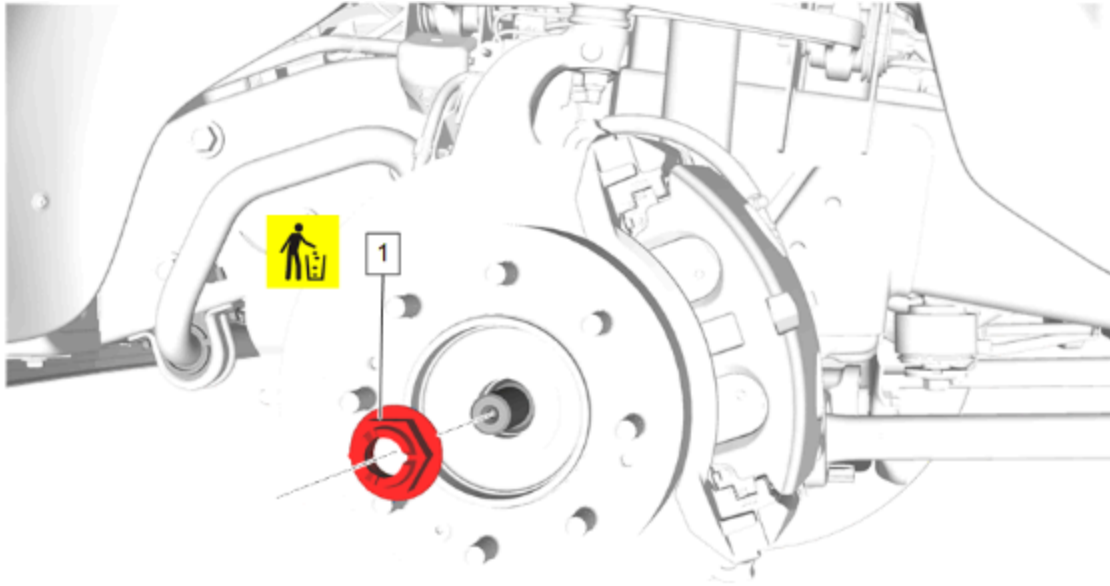
Note: Left side shown, right side similar.

14. Front Stabilizer Shaft Link Nut - Left Side and Right Side (1) » Remove [2x]
15. Front Stabilizer Shaft Link - Left Side and Right Side (2) @ Front Lower Control Arm » Remove [2x]



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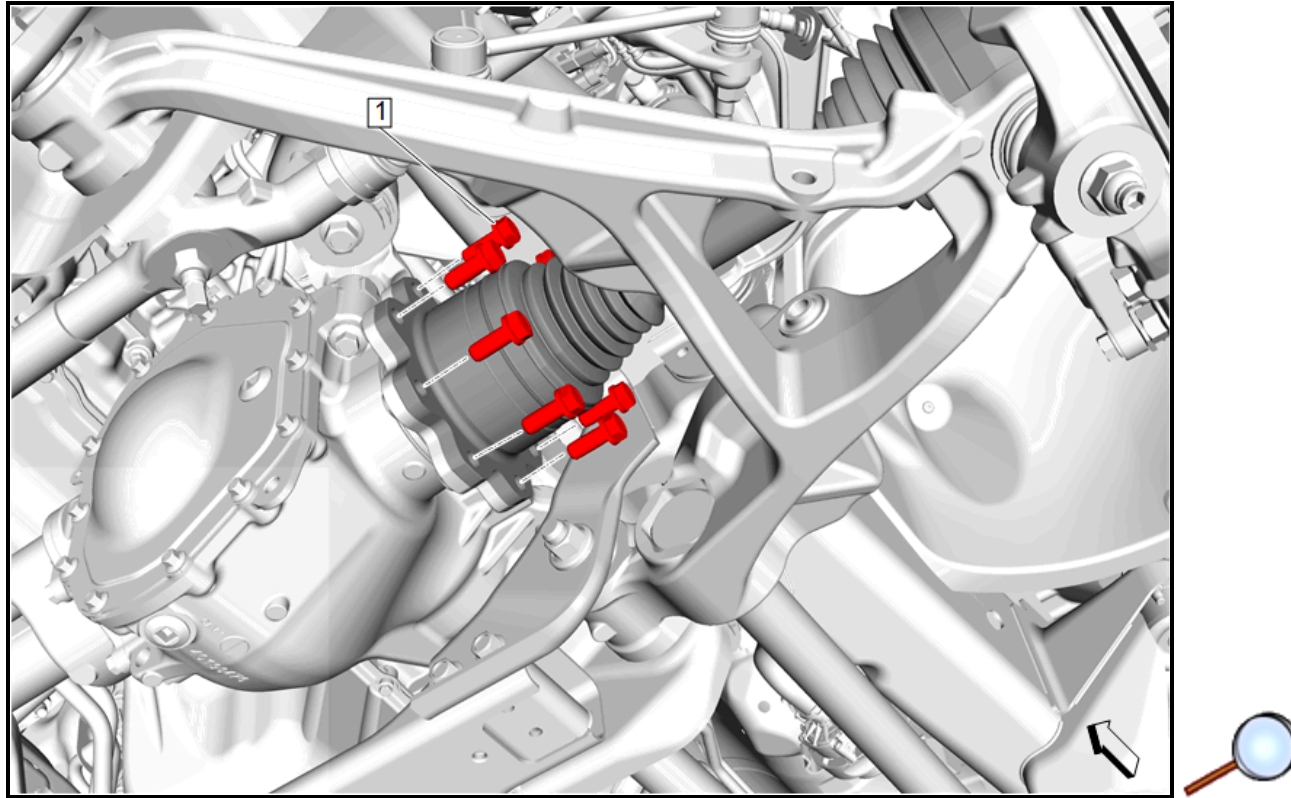
16. Front Axle Hub Cap (1) » Remove
17. Have an assistant apply the brakes.



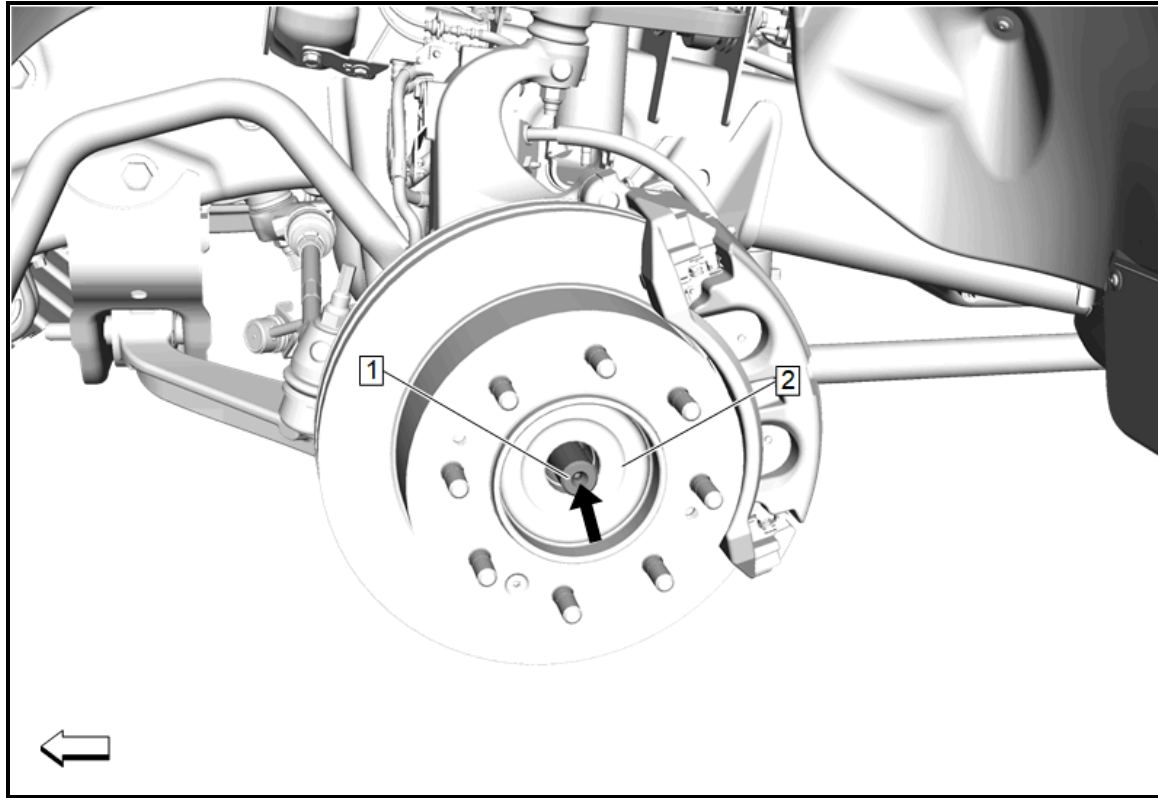
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Caution: DO NOT use air tools to remove the wheel drive shaft nut. Damage to the wheel drive shaft threads could occur. Use hand tools only.

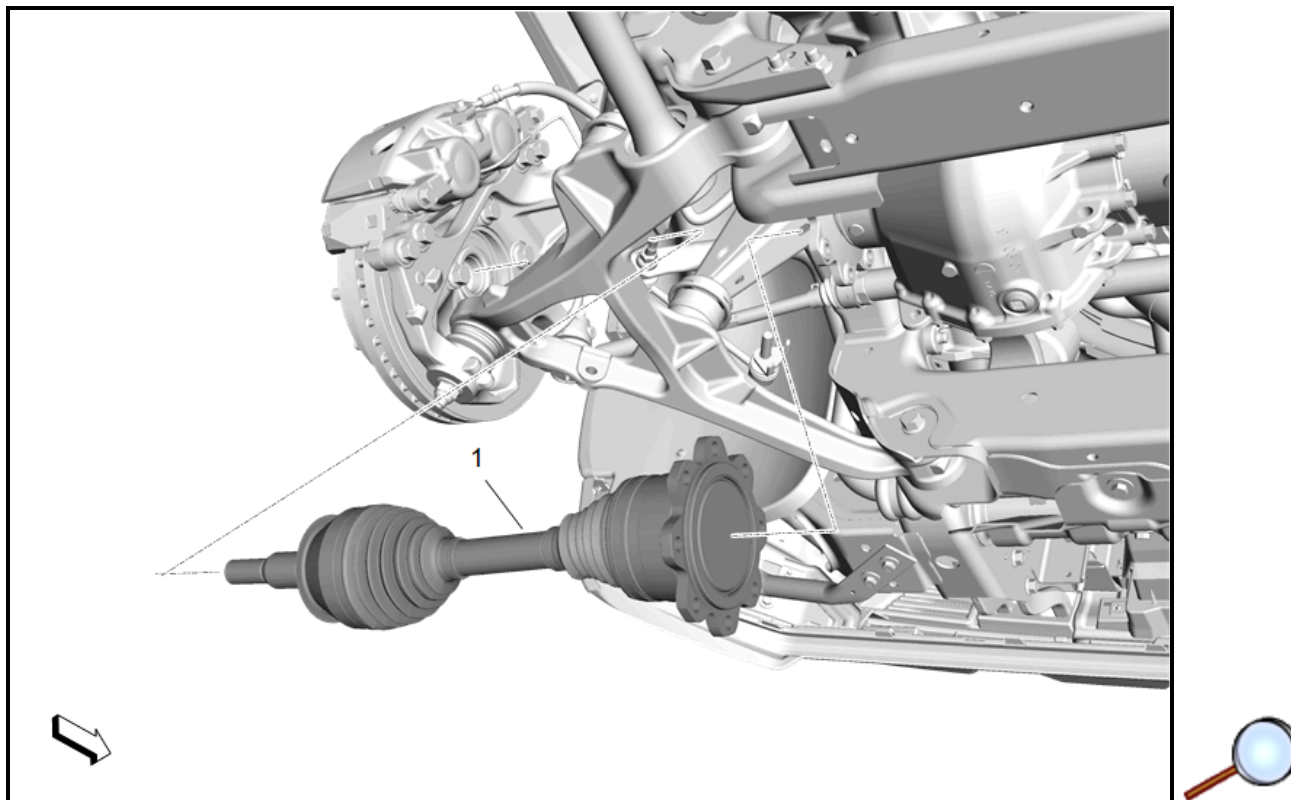
18. Front Wheel Drive Shaft Nut (1) » Remove and DISCARD



19. Front Wheel Drive Shaft Bolt (1) » Remove [8x]
20. Have an assistant release the brakes.

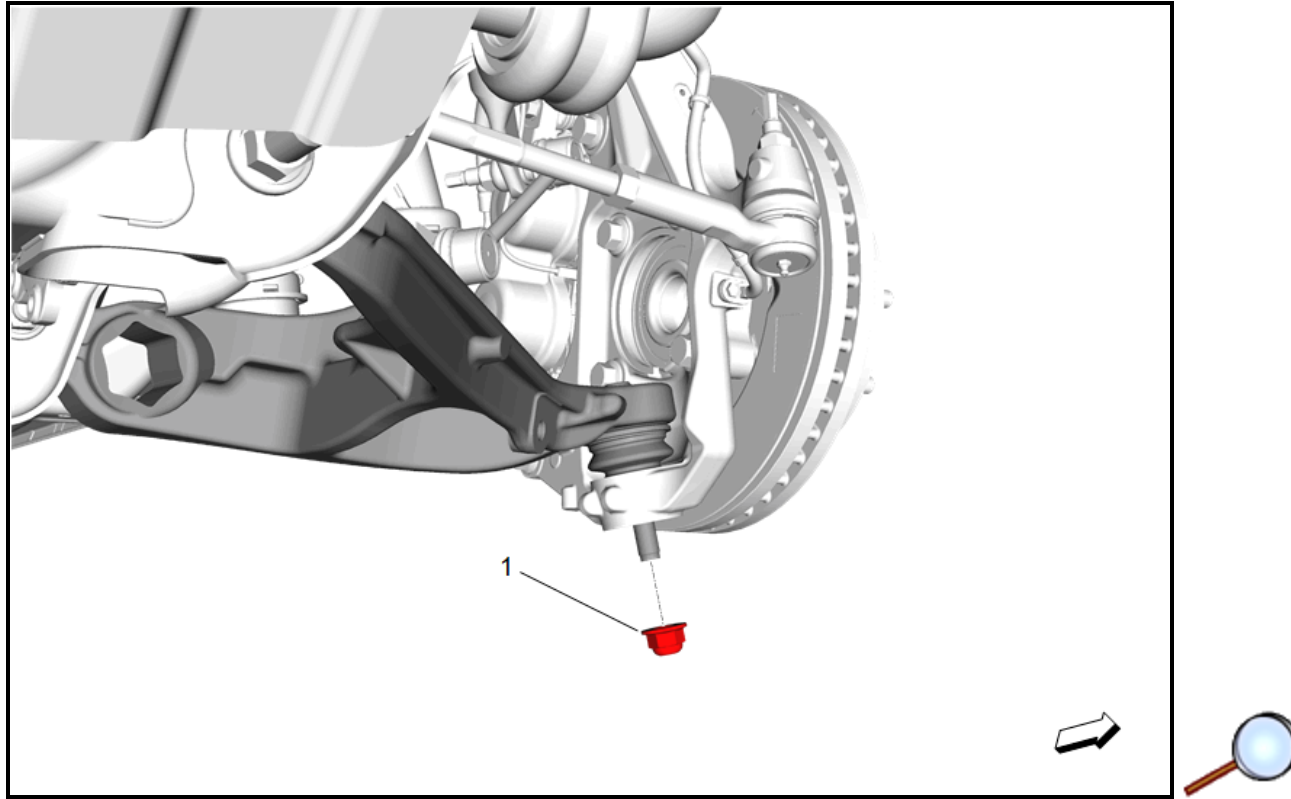


21. Using an appropriate tool, release the front wheel drive half shaft (1) from the front wheel hub (2).
22. Stabilizer Shaft » Reposition

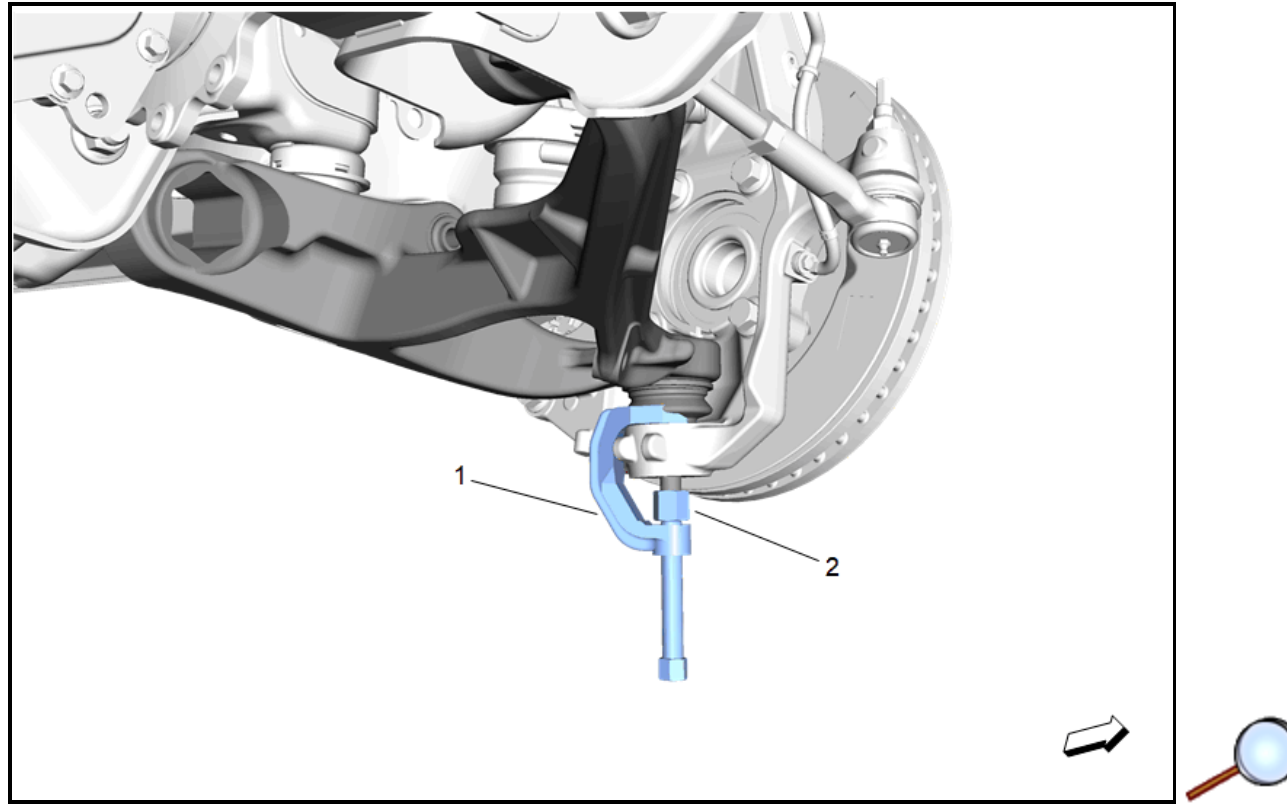


Caution: Wheel drive shaft boots, seals and clamps should be protected from sharp objects any time service is performed on or near the wheel drive shaft(s). Damage to the boot(s), the seal(s) or the clamp(s) may cause lubricant to leak from the joint and lead to increased noise and possible failure of the wheel drive shaft.

23. Front Wheel Drive Half Shaft (1) » Remove
24. Firmly support the steering knuckle and front upper control arm using heavy mechanic's wire or equivalent.

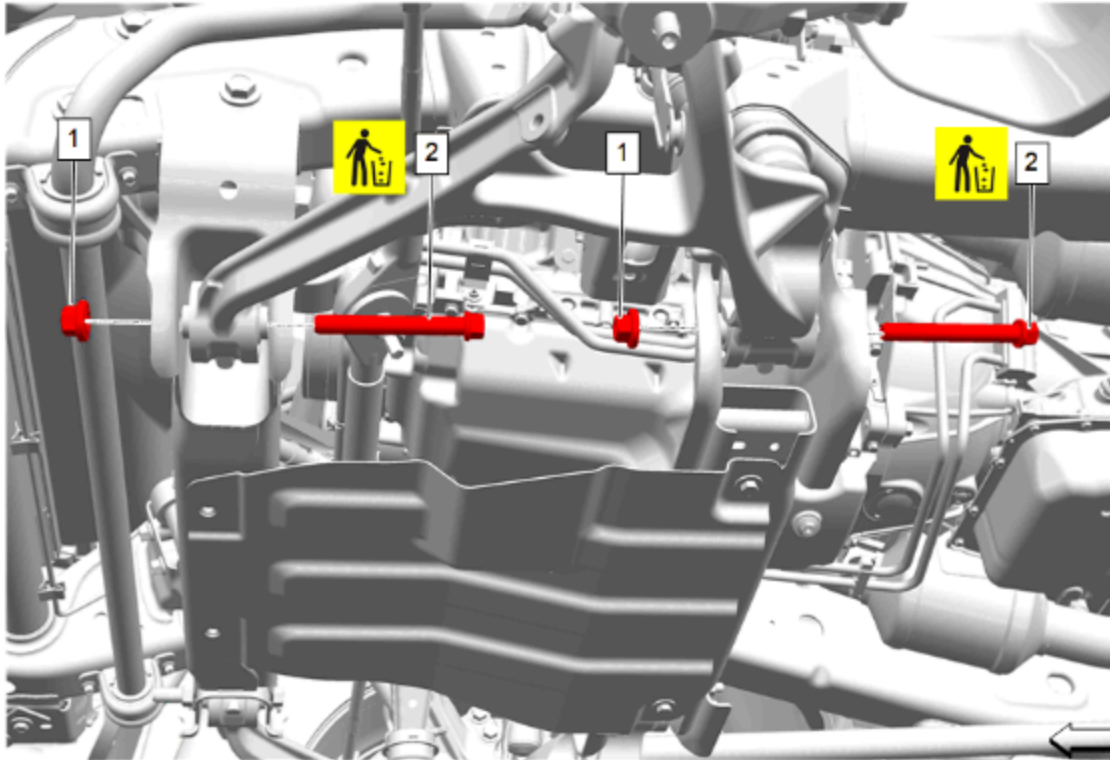


25. Front Lower Control Arm Ball Stud Nut (1) » Remove



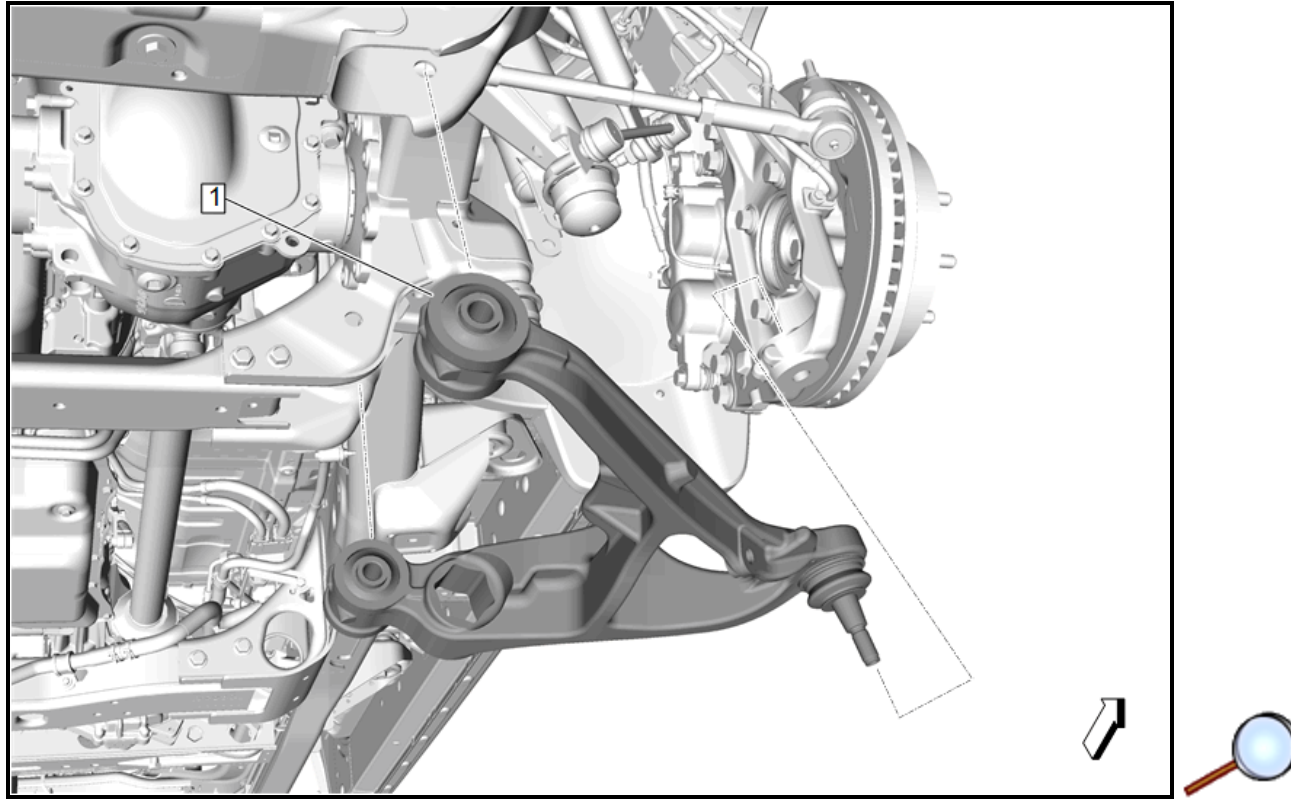
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26. Use the *CH-43631* Ball Joint Separator (1) and the *J-45851* Ball Joint Separator Protector Adapters (2) to separate the front lower control arm from the steering knuckle.



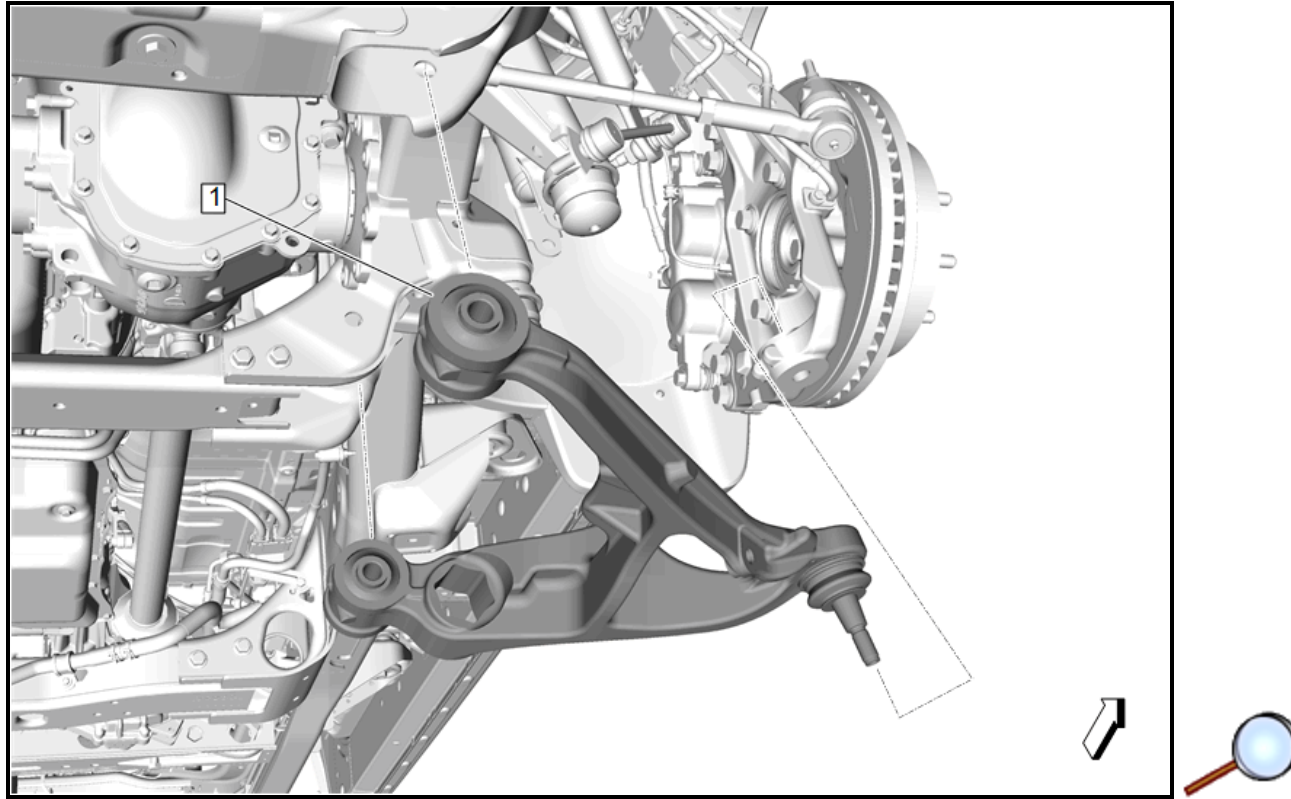
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27. Front Lower Control Arm Nut (1) » Remove [2x]
28. Front Lower Control Arm Bolt (2) » Remove and DISCARD [2x]

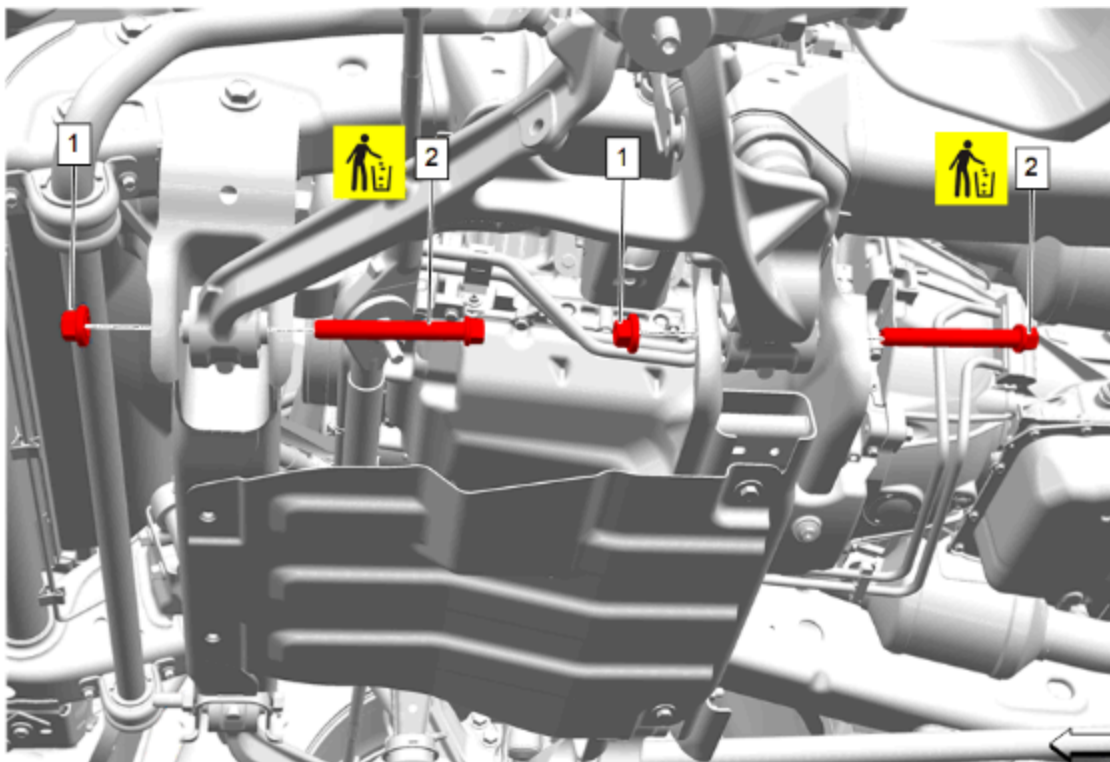


29. Front Lower Control Arm (1) » Remove

Installation Procedure



1. Front Lower Control Arm (1) » Install



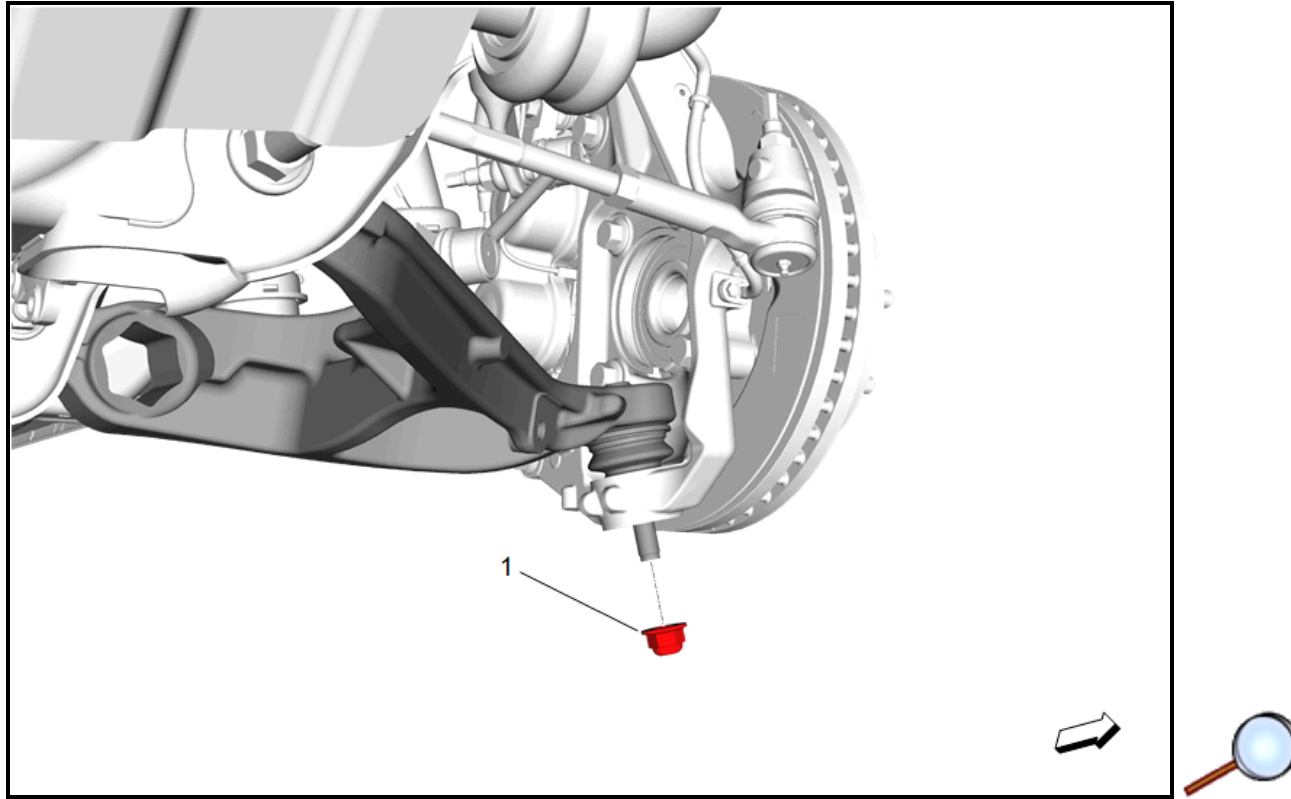
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Caution: This vehicle is equipped with torque-to-yield or single use fasteners. Install a NEW torque-to-yield or single use fastener when installing this component. Failure to replace the torque-to-yield or single use fastener could cause damage to the vehicle or component.

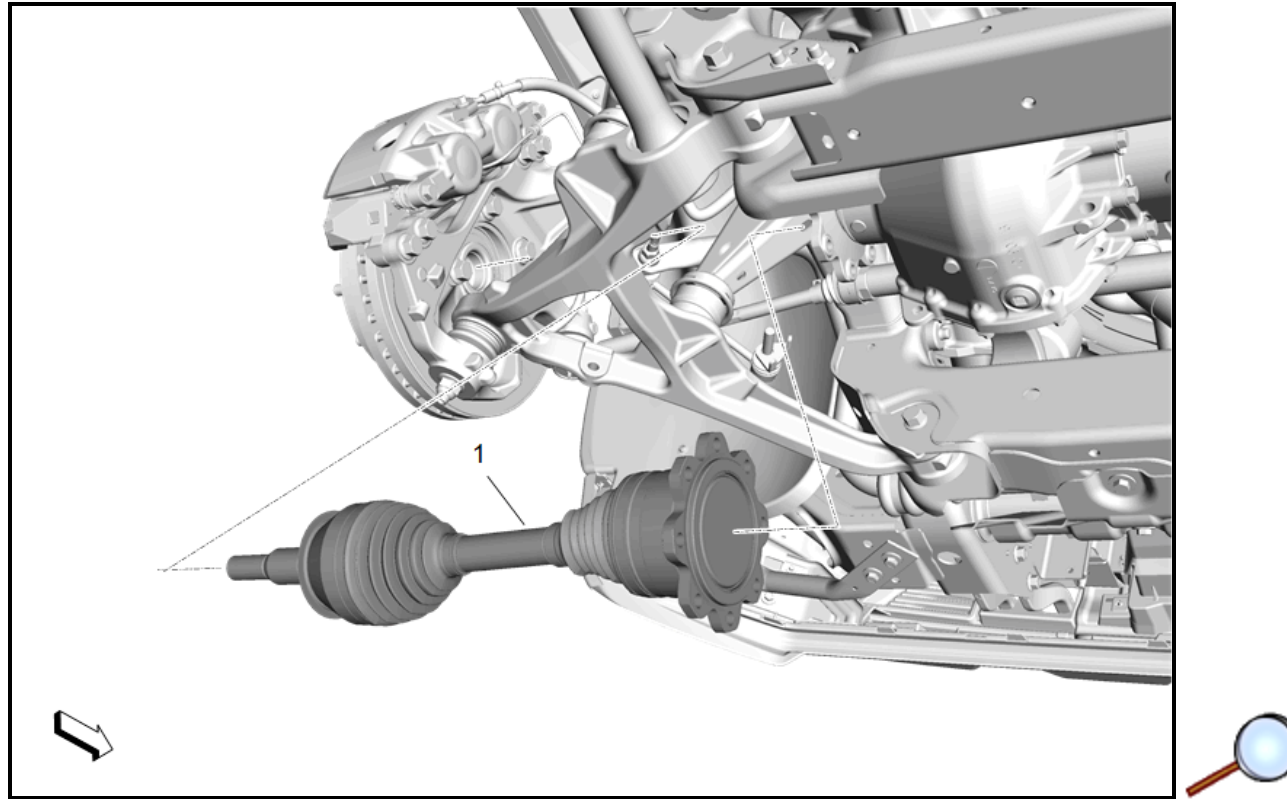
2. Front Lower Control Arm Bolt (2) » Install NEW [2x]
3. Front Lower Control Arm Nut (1) » Install, but do NOT tighten [2x]
4. Use an adjustable jack to raise the front lower control arm until it barely contacts both front lower control arm bumpers.

Caution: Refer to [Fastener Caution](#).

5. Front Lower Control Arm Nut (1) » Tighten [2x] — [Fastener Specifications](#)

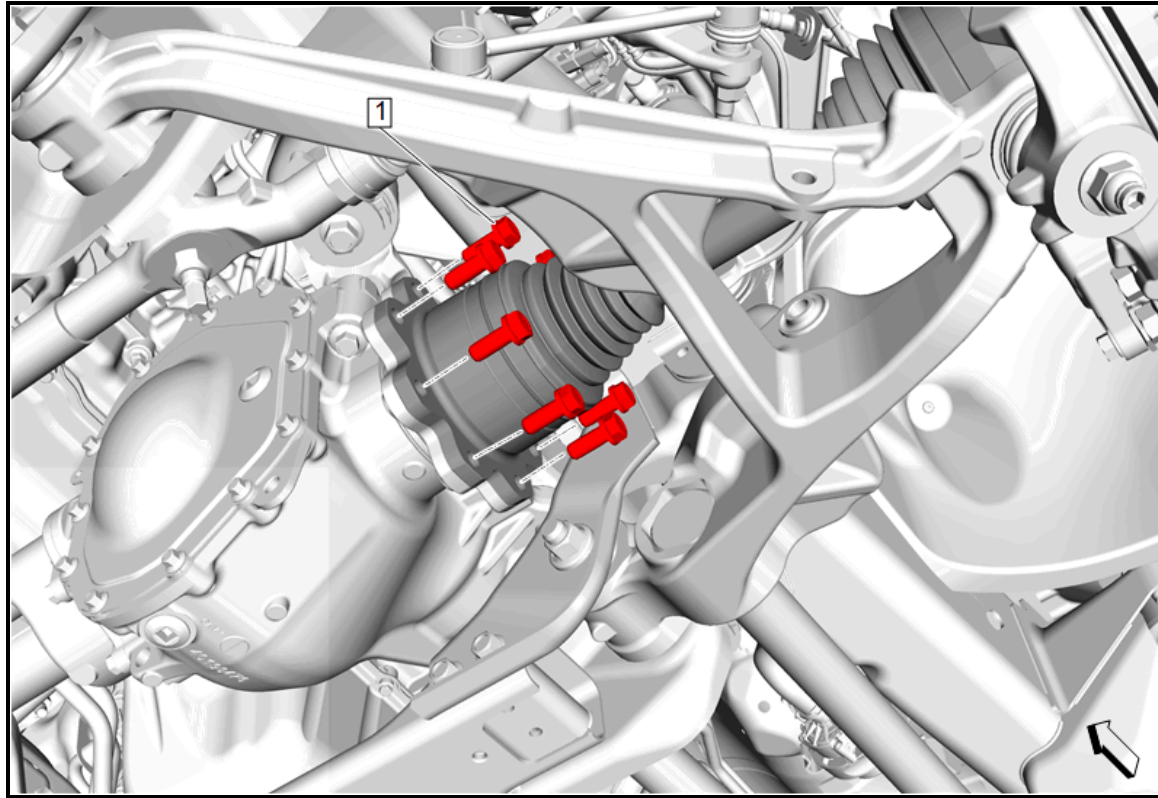


6. Front Lower Control Arm Ball Stud Nut (1) » Install and tighten — [Fastener Specifications](#)
7. Remove the heavy mechanic's wire or equivalent used to firmly support the steering knuckle and front upper control arm.

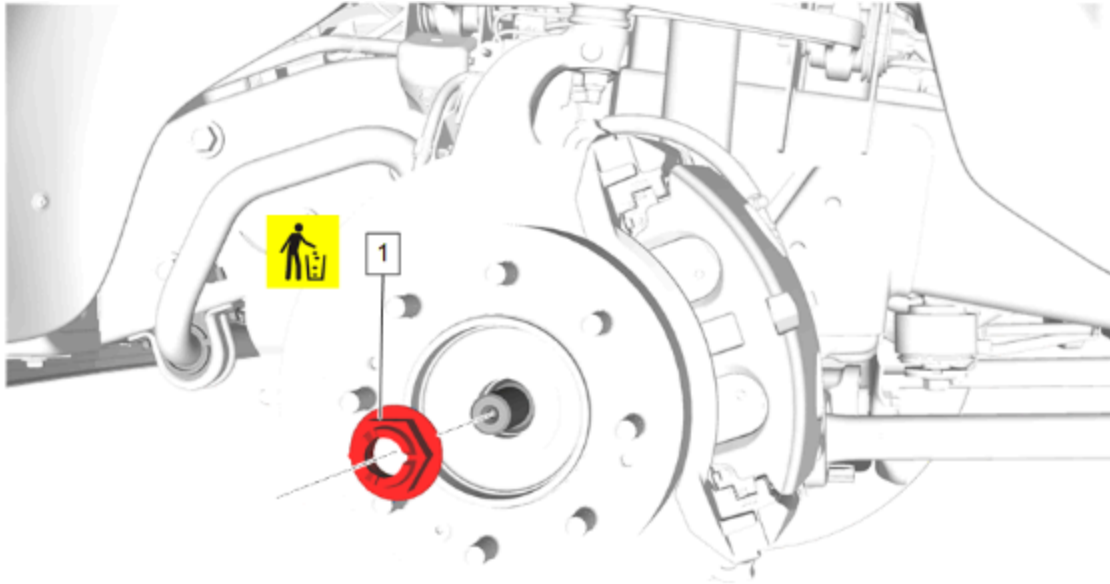


Caution: Wheel drive shaft boots, seals and clamps should be protected from sharp objects any time service is performed on or near the wheel drive shaft(s). Damage to the boot(s), the seal(s) or the clamp(s) may cause lubricant to leak from the joint and lead to increased noise and possible failure of the wheel drive shaft.

8. Front Wheel Drive Half Shaft (1) » Install

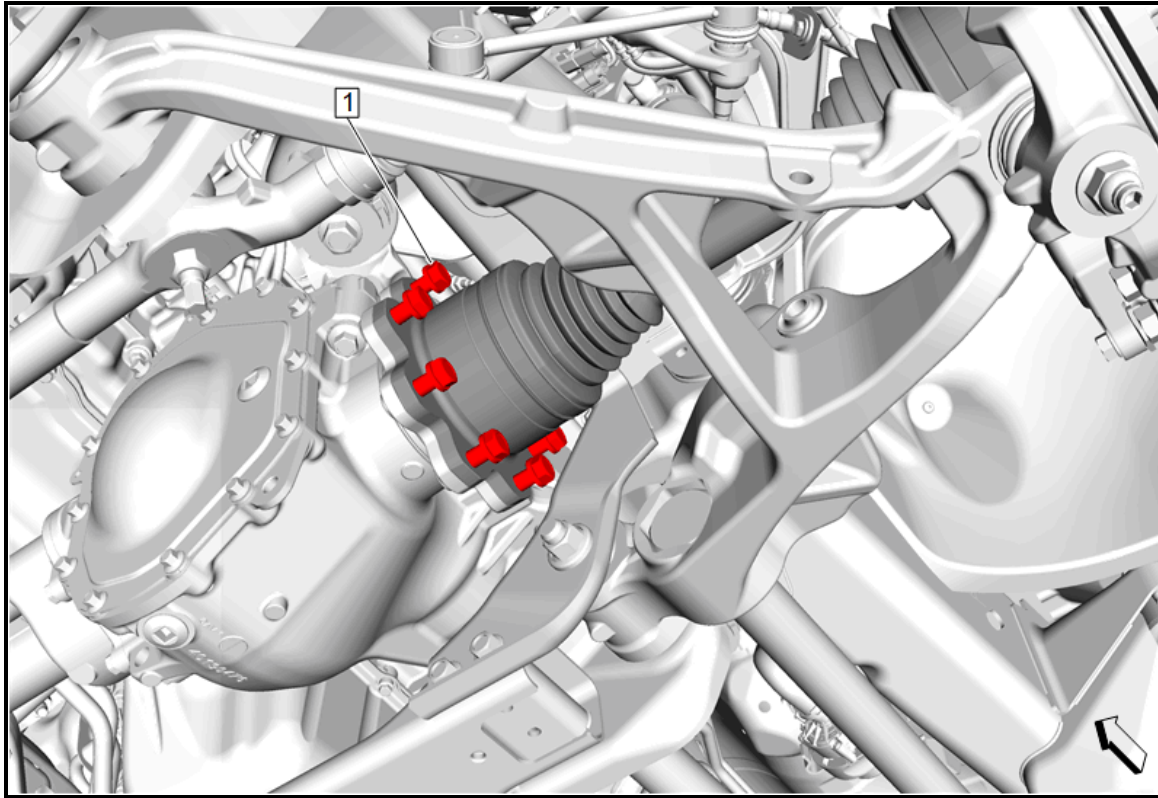


9. If NEW threaded components are being installed, loosen the adhesive using a metal pick or similar tool before proceeding. If threaded components are reused, prepare the threaded components using the following steps:
 - 9.1. Remove any loose cured adhesive from the external threads of the components using a lint free cloth.
 - 9.2. Thread the cleaned components into the internal mating threads and remove to loosen trapped cured adhesive.
 - 9.3. Remove loose debris from internal and external threads using compressed air.
 - 9.4. Apply liquid thread locking adhesive in a strip along half of the length of the external threads, starting at the tip, just prior to installation. [Adhesives, Fluids, Lubricants, and Sealers](#)
10. Front Wheel Drive Shaft Bolt (1) » Install and hand tighten [8x]

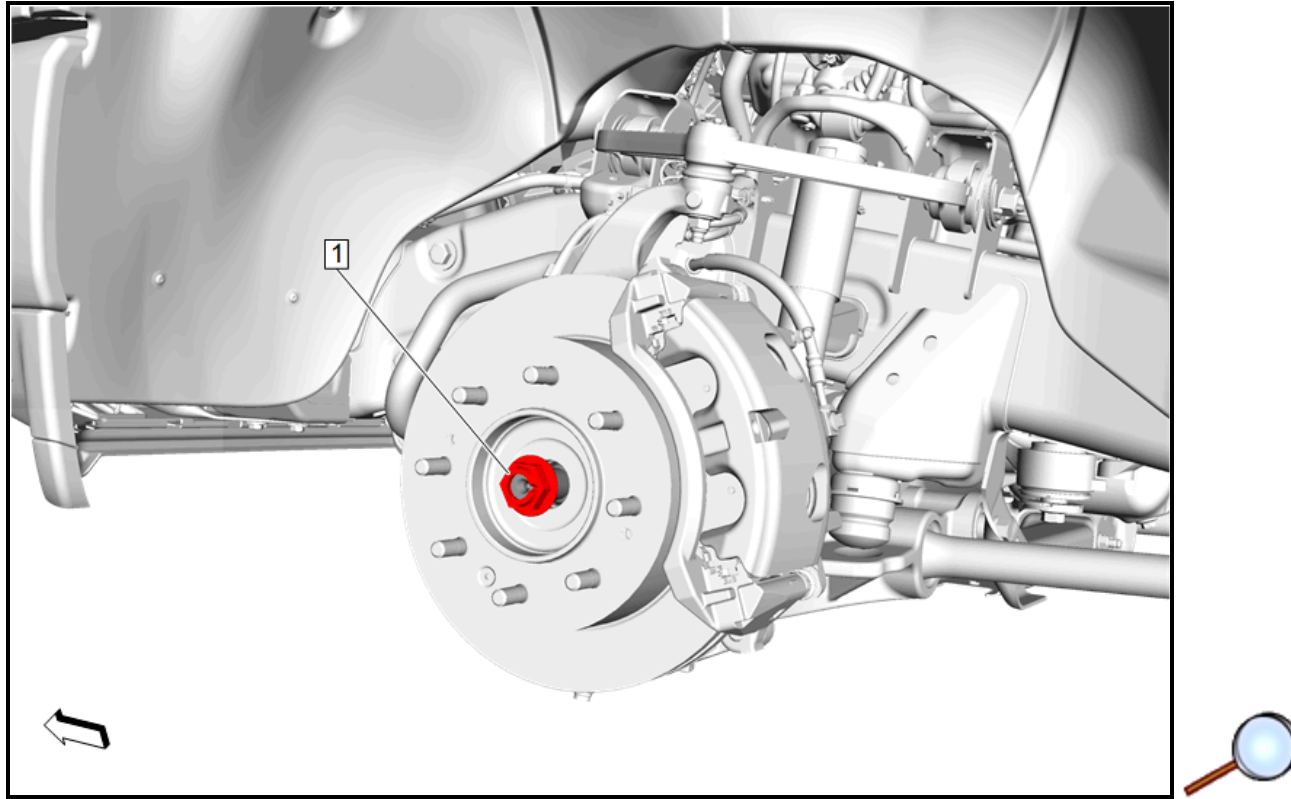


Caution: This vehicle is equipped with torque-to-yield or single use fasteners. Install a NEW torque-to-yield or single use fastener when installing this component. Failure to replace the torque-to-yield or single use fastener could cause damage to the vehicle or component.

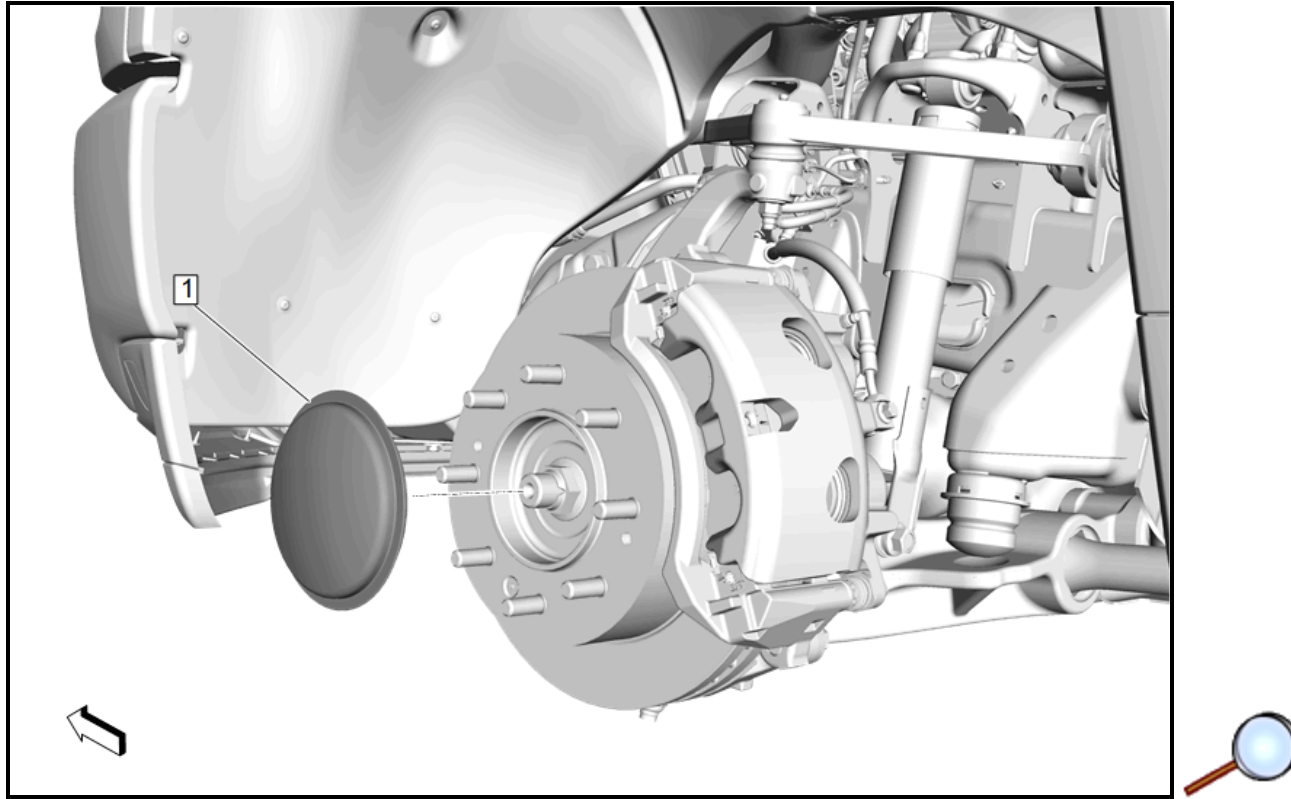
11. Front Wheel Drive Shaft Nut (1) » Install NEW and hand tighten
12. Have an assistant apply the brakes.



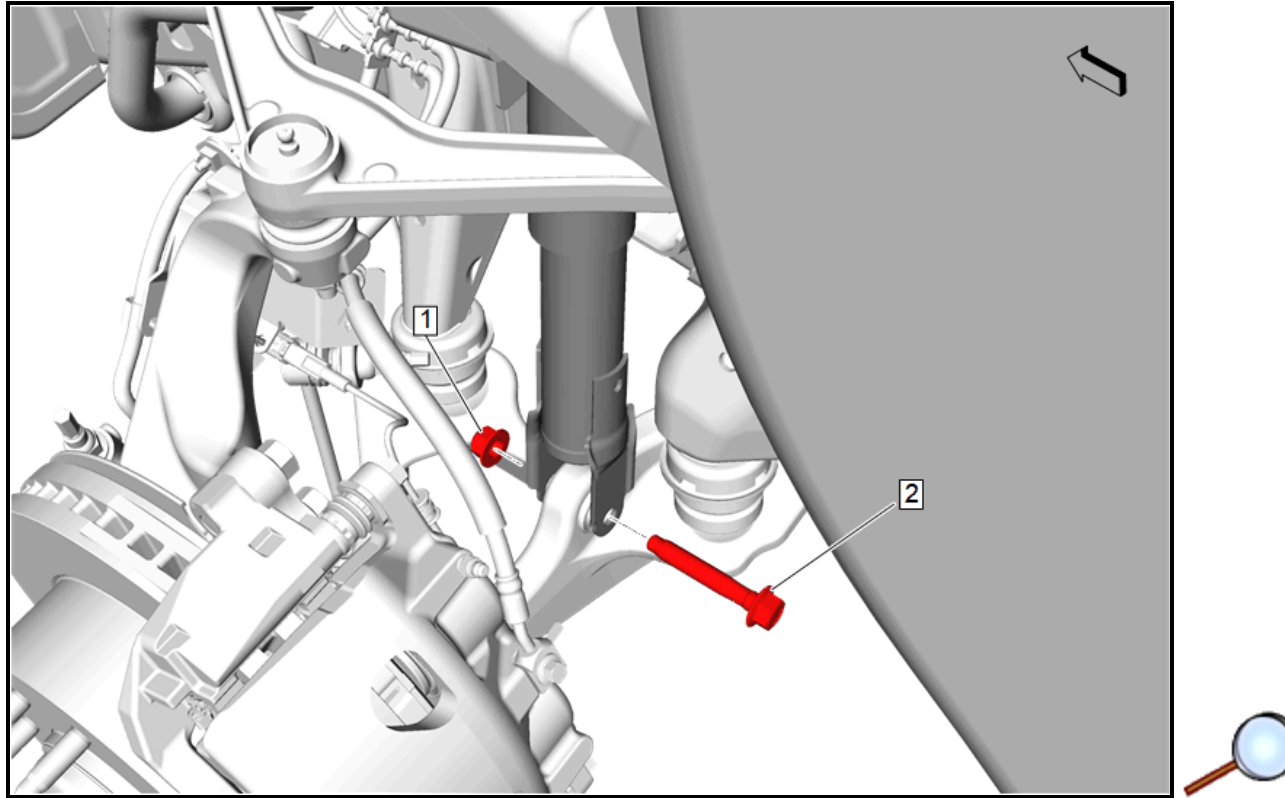
13. Tighten the 8 front wheel drive shaft bolts (1) in a crisscross pattern. [Fastener Specifications](#)



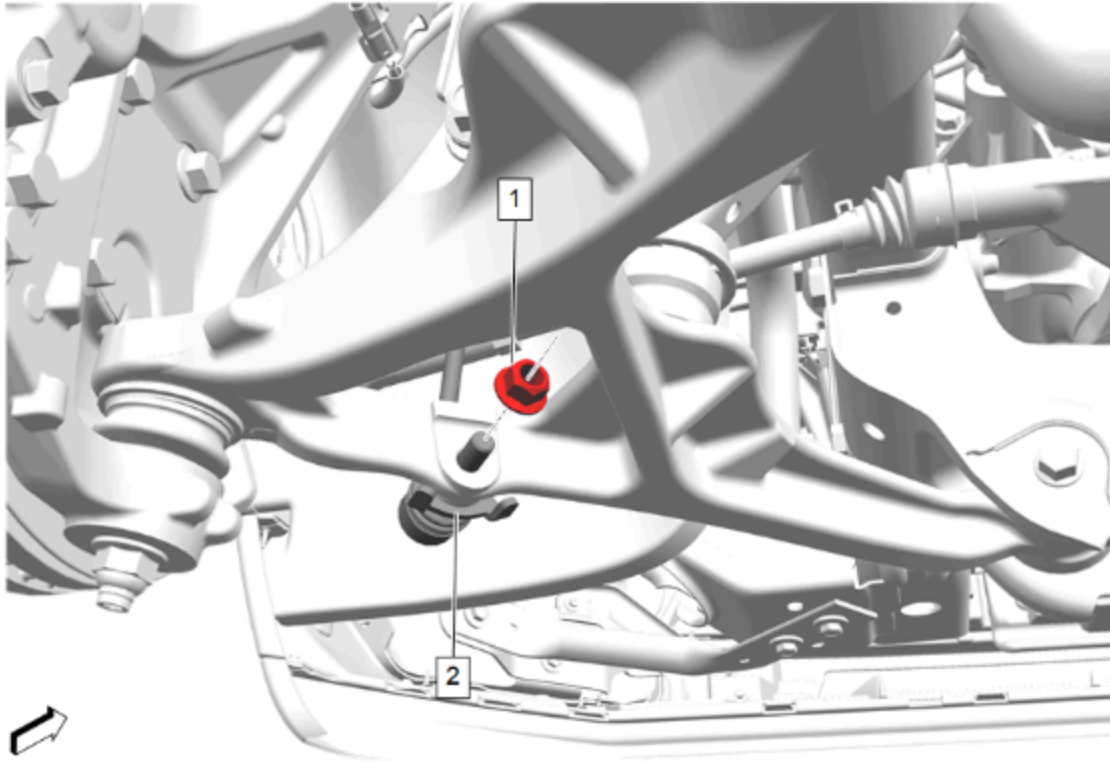
14. Front Wheel Drive Shaft Nut (1) » Tighten — [Fastener Specifications](#)
15. Have an assistant release the brakes.



16. Front Axle Hub Cap (1) » Install



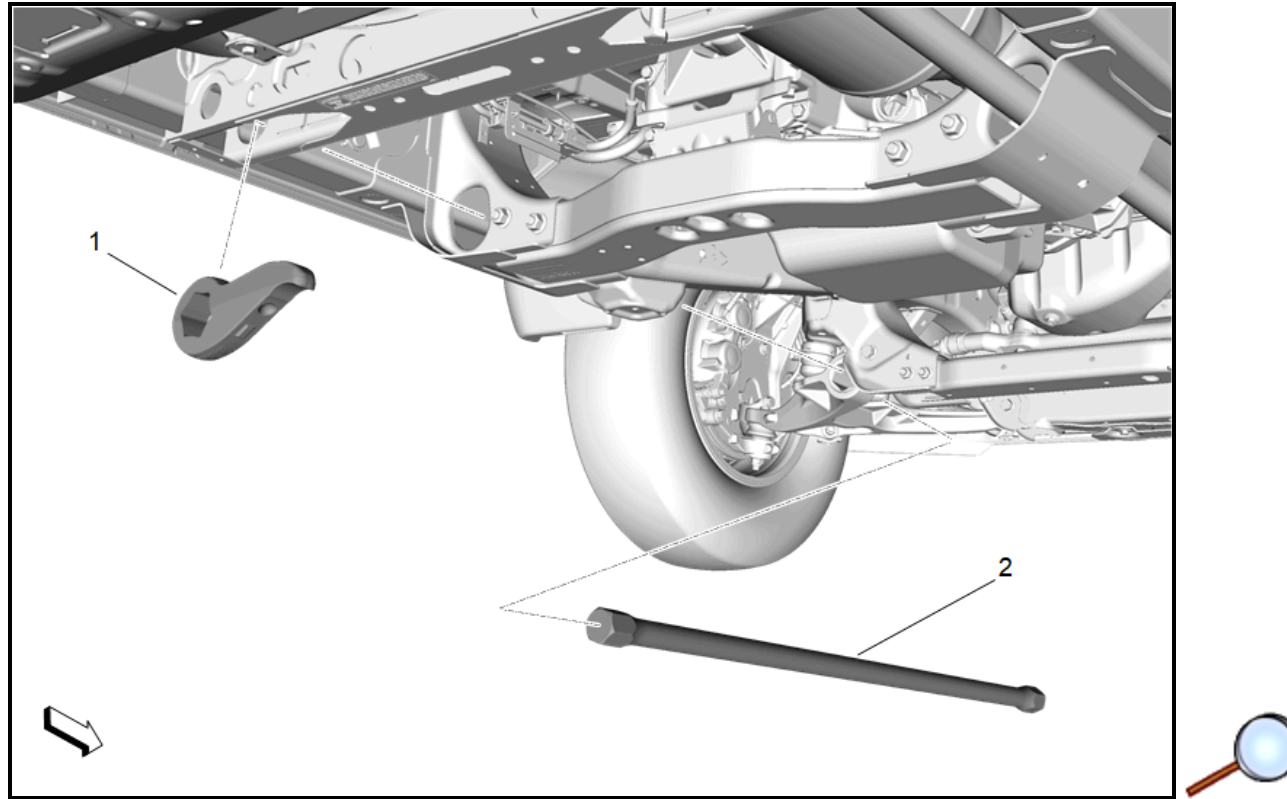
17. Front Shock Absorber Bolt (2) » Install
18. Front Shock Absorber Nut - Lower (1) » Loosely install
19. Front Shock Absorber Bolt (2) » Tighten — [Fastener Specifications](#)



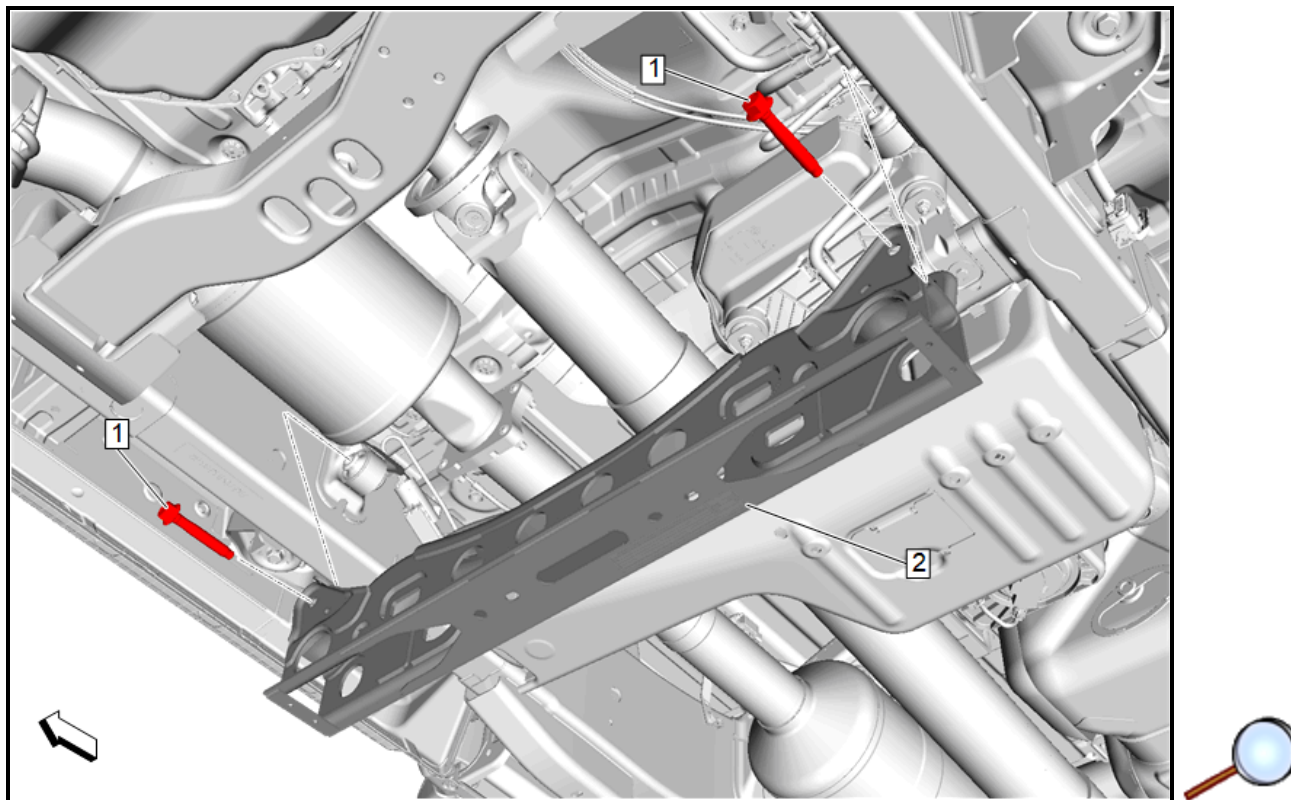
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20. Stabilizer Shaft Link - Left Side and Right Side (2) » Install [2x]

21. Stabilizer Shaft Link Nut - Left Side and Right Side (1) » Install and tighten [2x] — [Fastener Specifications](#)



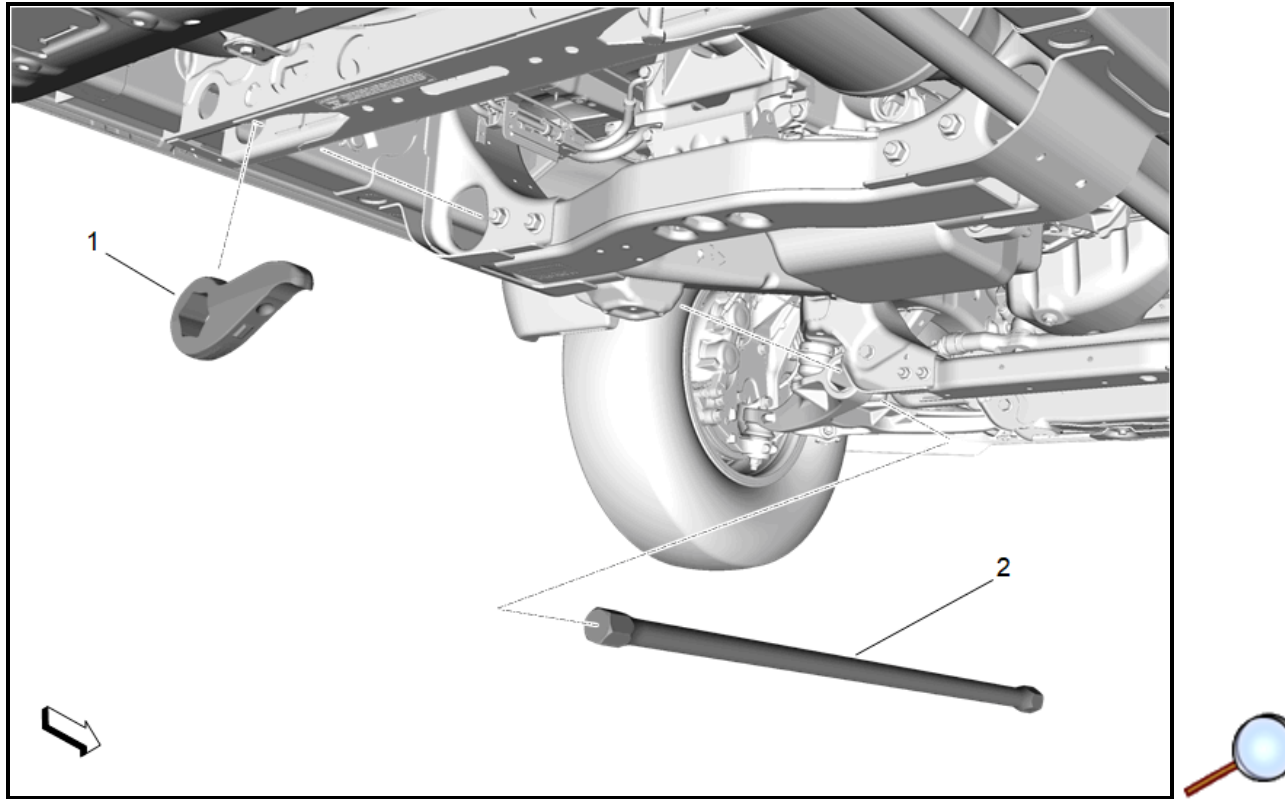
22. Slide the front torsion bar (2) forward through the frame and manipulate it into the lower control arm.



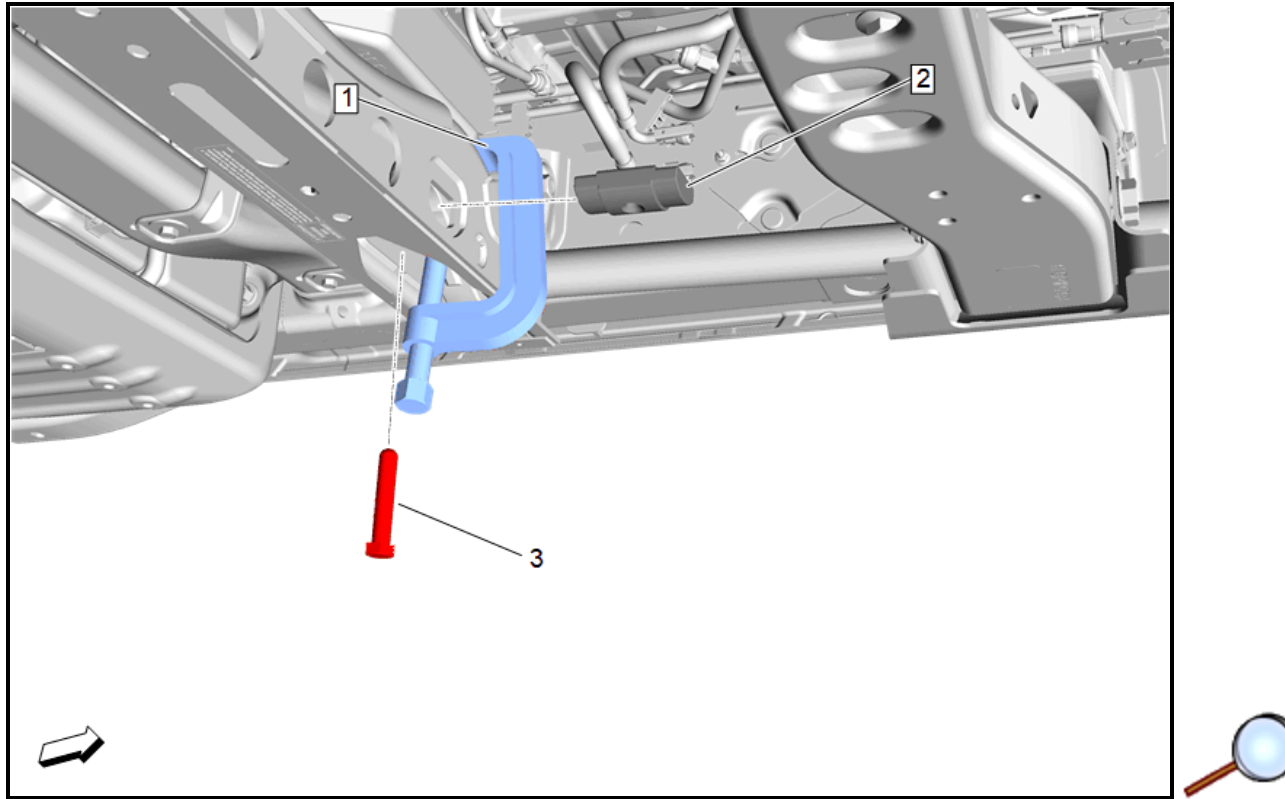
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23. Torsion Bar Support (2) » Install

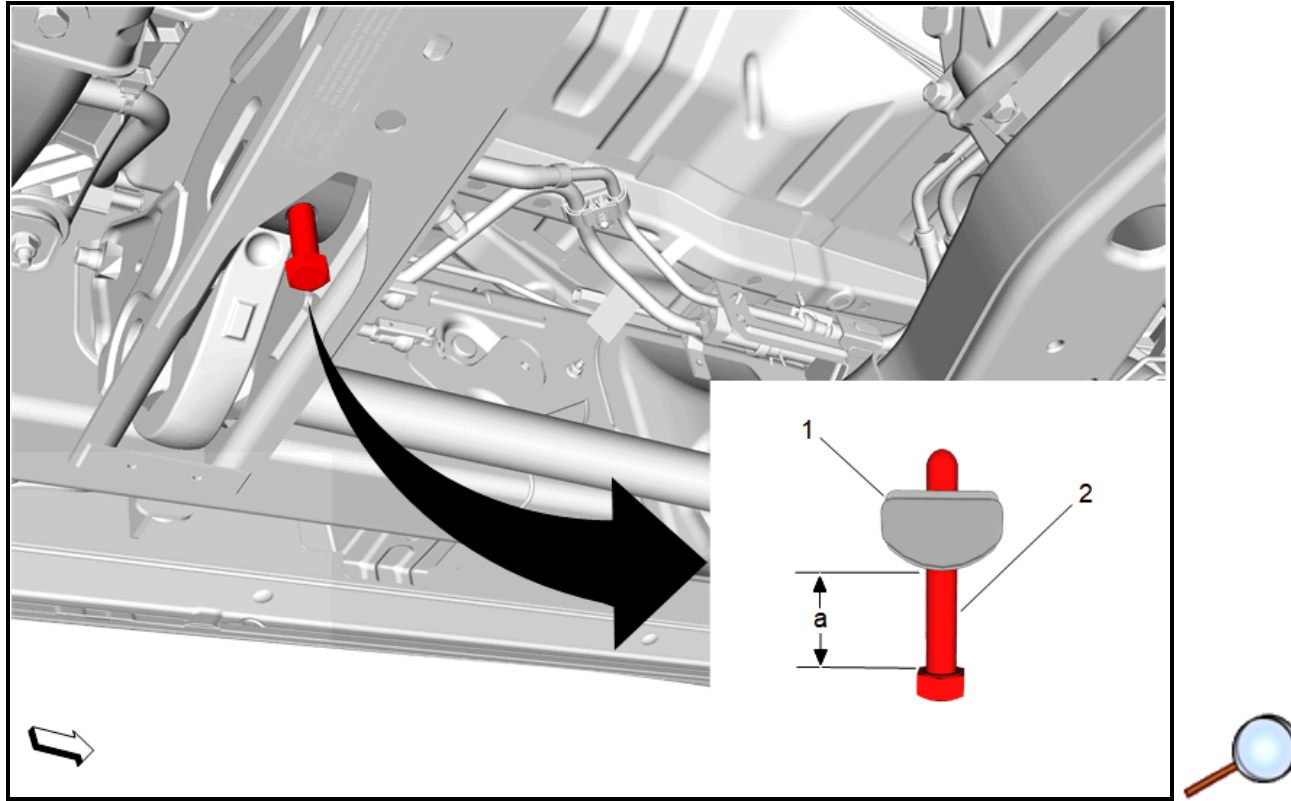
24. Torsion Bar Support Bolt (1) » Install and tighten [2x] — [Fastener Specifications](#)



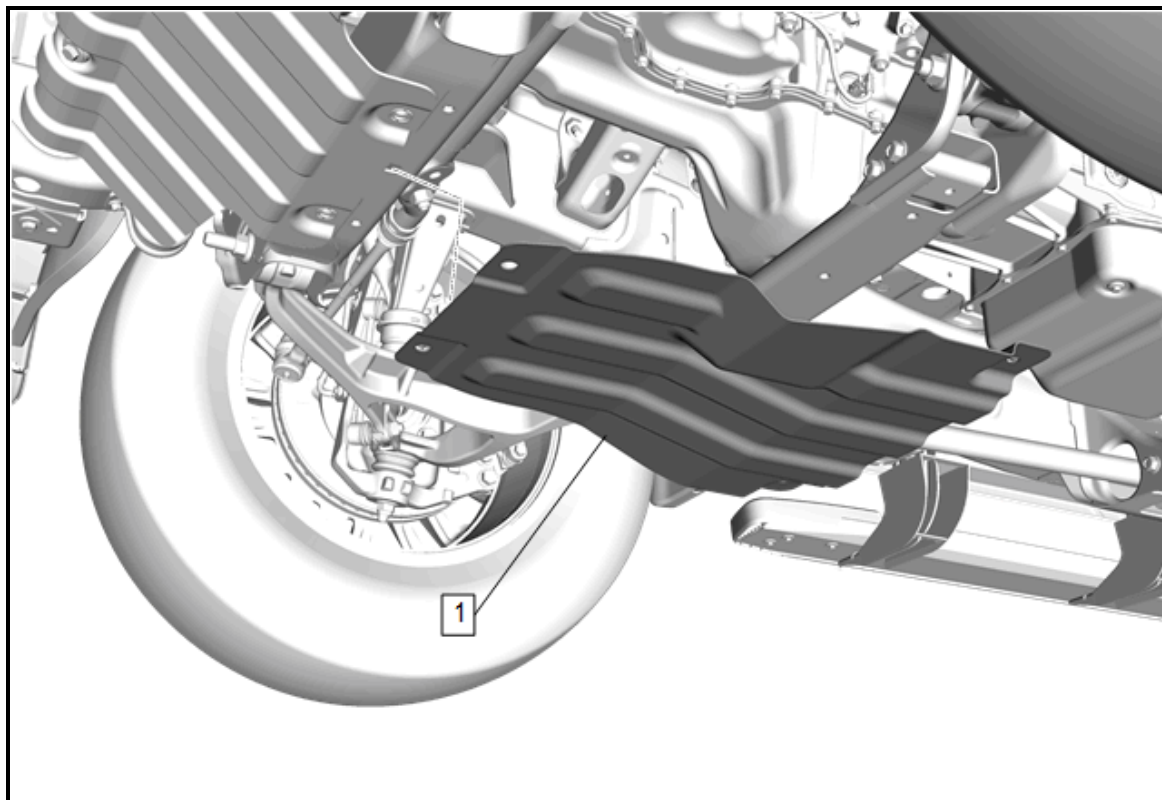
25. Install the front torsion bar adjust arms (1) into the torsion bar support and slide the front torsion bars (2) into the front torsion bar adjust arms (1).



26. Install the *CH-48809* Torsion Bar Unloading/Loading and apply sufficient tension to the front torsion bars to allow installation of the torsion bar adjust nuts (2).
27. Slide the torsion bar adjust nuts (2) into the torsion bar support.
28. Apply a thin coating of grease to the torsion bar adjust bolts. [Adhesives, Fluids, Lubricants, and Sealers](#)
29. Loosely install the torsion bar adjust bolts (3).
30. Release tension from the front torsion bar and remove the *CH-48809* Torsion Bar Unloading/Loading.



31. Tighten the torsion bar adjust bolts (2) into the torsion bar adjust nuts (1) until the previously recorded measurement (a) is achieved.



32. Underbody Skid Shield (1) » Install — [Underbody Skid Shield Replacement](#)
33. Install the tire and wheel assembly. [Tire and Wheel Removal and Installation](#)