

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3

2007 SUSPENSION

Front Suspension - H3

SPECIFICATIONS

FASTENER TIGHTENING SPECIFICATIONS

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Hub and Bearing Assembly to Steering Knuckle Bolts	180 N.m	133 lb ft
Lower Control Arm Ball Joint Stud Nut		
• First Pass	85 N.m	63 lb ft
• Second Pass	Plus 60 Degrees	
Lower Control Arm to Frame Bolts Front	165 N.m	122 lb ft
Lower Control Arm to Frame Bolts Rear	180 N.m	133 lb ft
Shock Absorber Tenon Nut	30 N.m	22 lb ft
Shock Absorber to Lower Control Arm Nut	80 N.m	59 lb ft
Stabilizer Shaft Insulator Clamp Bolts	50 N.m	37 lb ft
Stabilizer Shaft Link Nuts	80 N.m	59 lb ft
Upper Control Arm Ball Pinch Bolt Nut	70 N.m	51 lb ft
Upper Control Arm to Frame Nuts	155 N.m	114 lb ft
Wheel Speed Sensor Mounting Bracket Bolt	20 N.m	15 lb ft

REPAIR INSTRUCTIONS

STABILIZER SHAFT REPLACEMENT

Removal Procedure

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

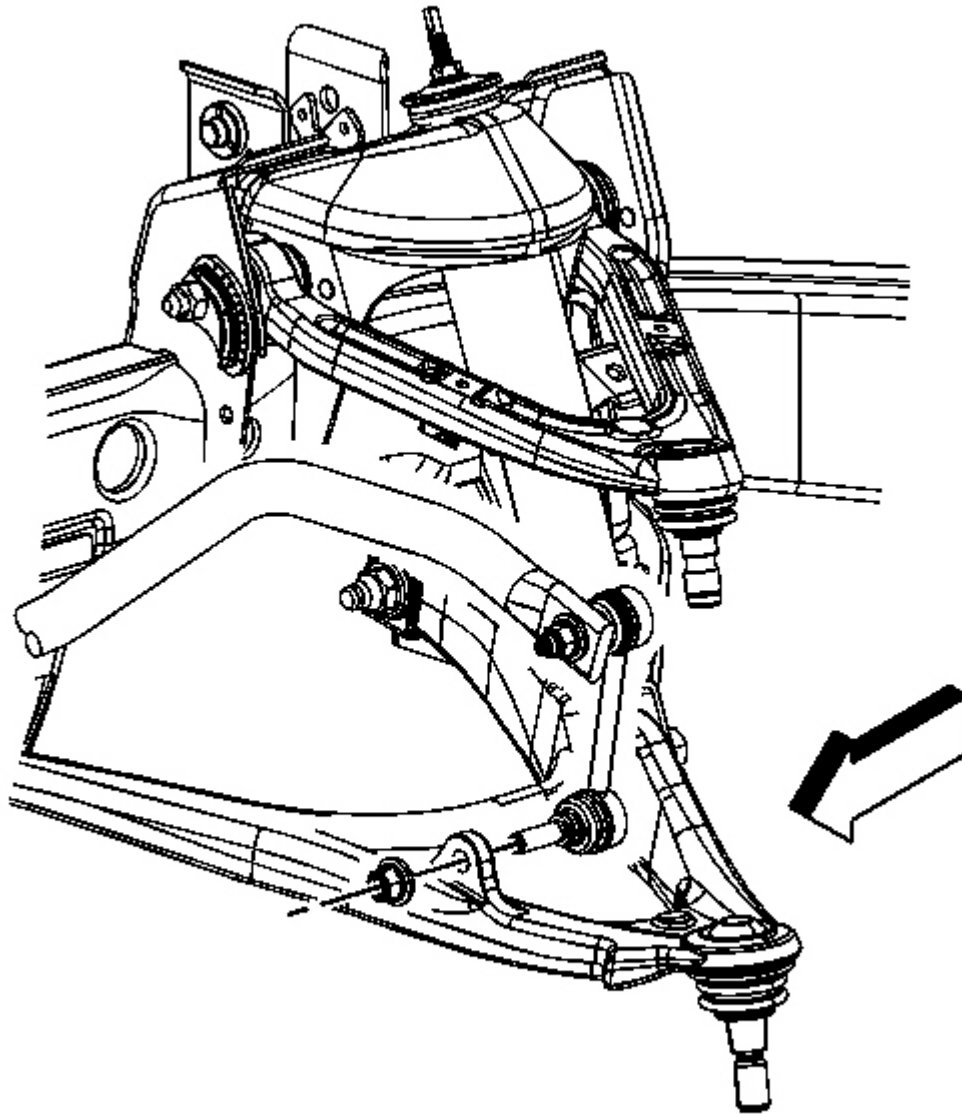


Fig. 1: View Of Link Assembly
Courtesy of GENERAL MOTORS CORP.

2. Remove the nuts from the link assemblies.
3. Remove the link assemblies.

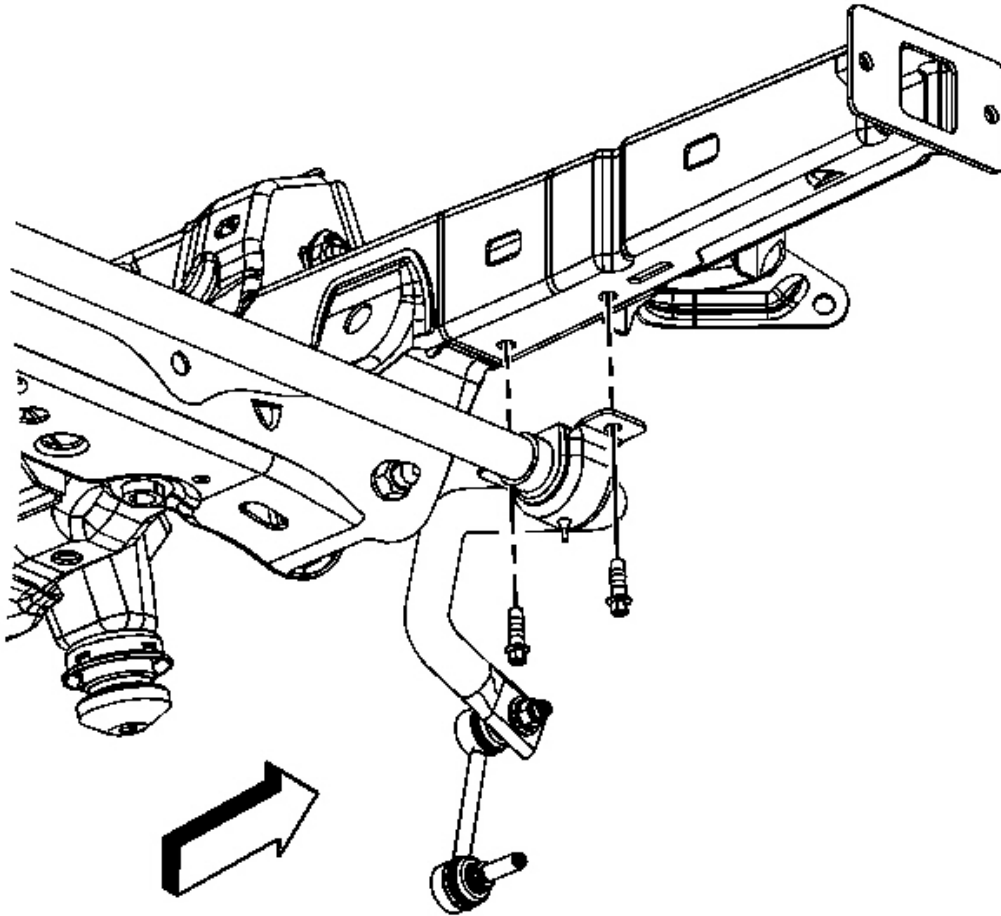


Fig. 2:
Courtesy of GENERAL MOTORS CORP.

4. Remove the insulator clamp bolts.
5. Remove the clamps.
6. Remove the stabilizer shaft.
7. Remove the insulators.
8. Inspect all of the parts for wear and damage.

Installation Procedure

1. Install the insulators to the stabilizer shaft.

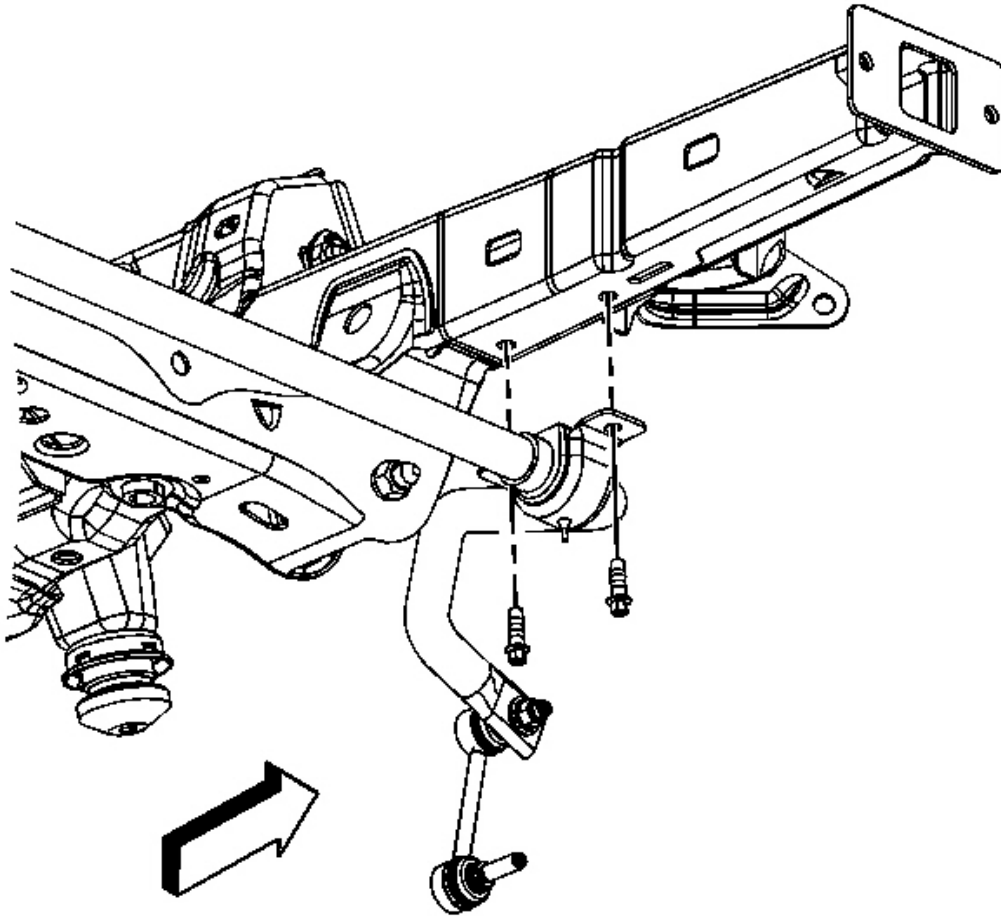


Fig. 3:
Courtesy of GENERAL MOTORS CORP.

2. Install the stabilizer shaft.
3. Install the clamps over the insulators and the stabilizer shaft.

NOTE: Refer to Fastener Notice .

4. Install insulator clamp bolts.

Tighten: Tighten the bolts to 50 N.m (37 lb ft).

5. Support the lower control arms at curb height.

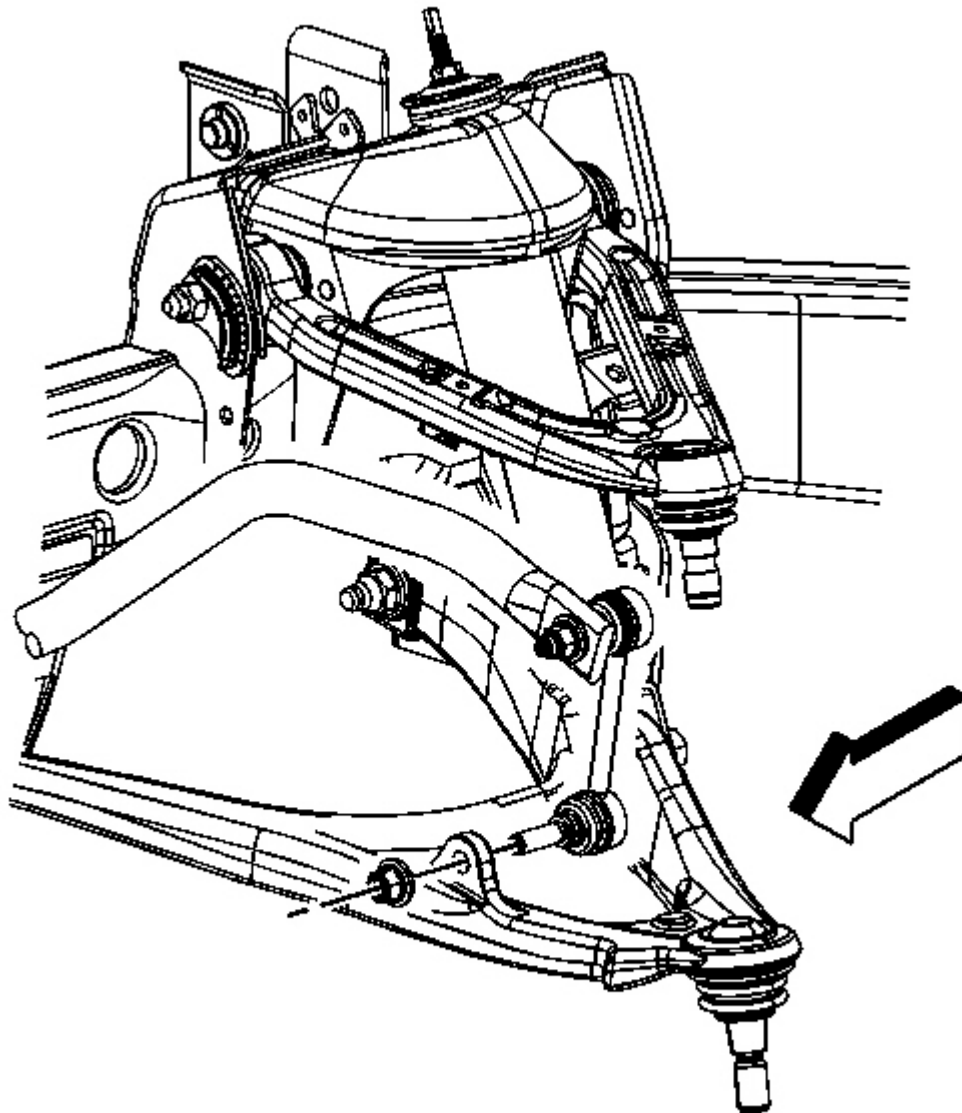


Fig. 4: Link Assembly
Courtesy of GENERAL MOTORS CORP.

6. Install the link assemblies.

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3

7. Install the nuts to the link assemblies.

Tighten: Tighten the nut to 80 N.m (59 lb ft).

8. Lower the vehicle.

STABILIZER SHAFT LINK REPLACEMENT

Removal Procedure

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

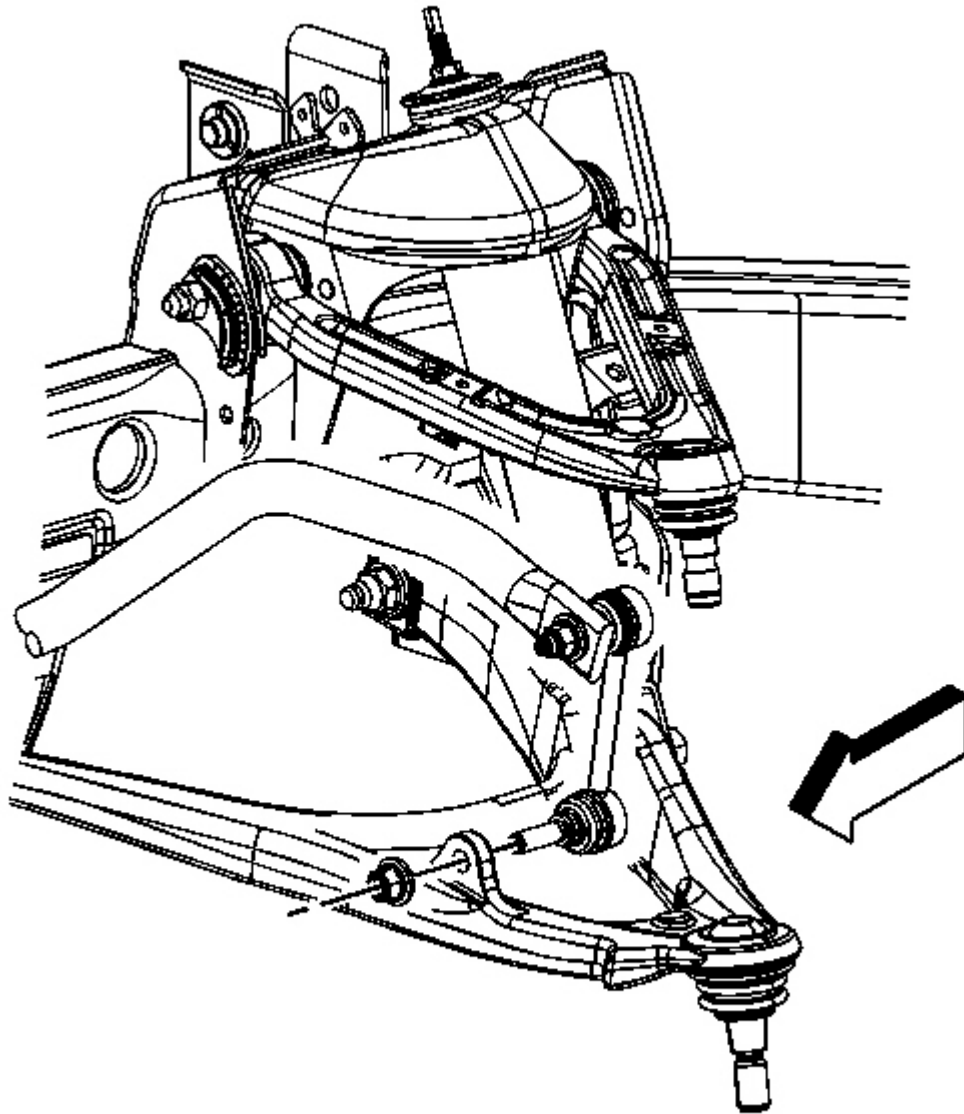


Fig. 5: Link Assembly
Courtesy of GENERAL MOTORS CORP.

2. Remove the nuts from the link assemblies.
3. Remove the link assemblies.
4. Inspect all of the parts for wear and damage.

Installation Procedure

1. Support the lower control arms at curb height.

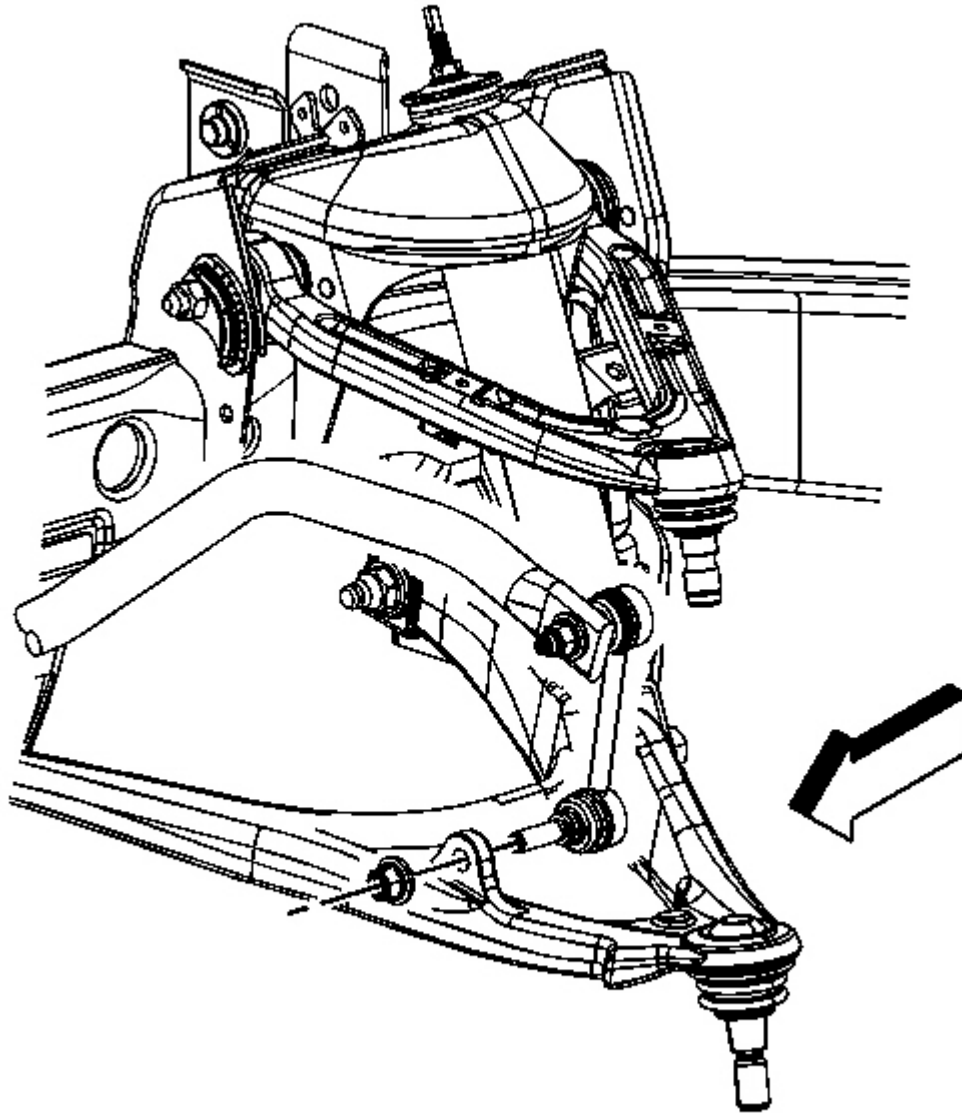


Fig. 6: Link Assembly
Courtesy of GENERAL MOTORS CORP.

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3

2. Install the link assemblies.

NOTE: Refer to Fastener Notice .

3. Install the nuts to the link assemblies.

Tighten: Tighten the nut to 80 N.m (59 lb ft).

4. Lower the vehicle.

STABILIZER SHAFT INSULATOR REPLACEMENT

Removal Procedure

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

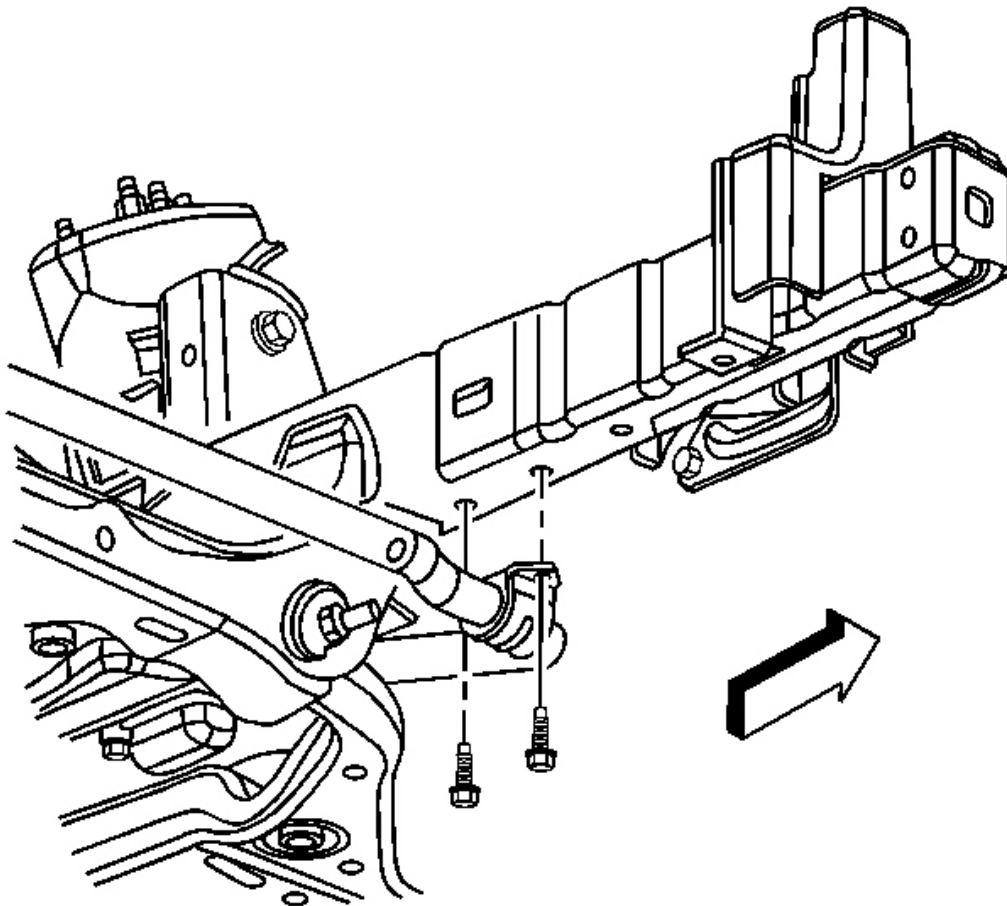


Fig. 7: View Of Insulator Clamp Bolts
Courtesy of GENERAL MOTORS CORP.

2. Remove the insulator clamp bolts.
3. Remove the clamps.
4. Remove the insulators.
5. Inspect all of the parts for wear and damage.

Installation Procedure

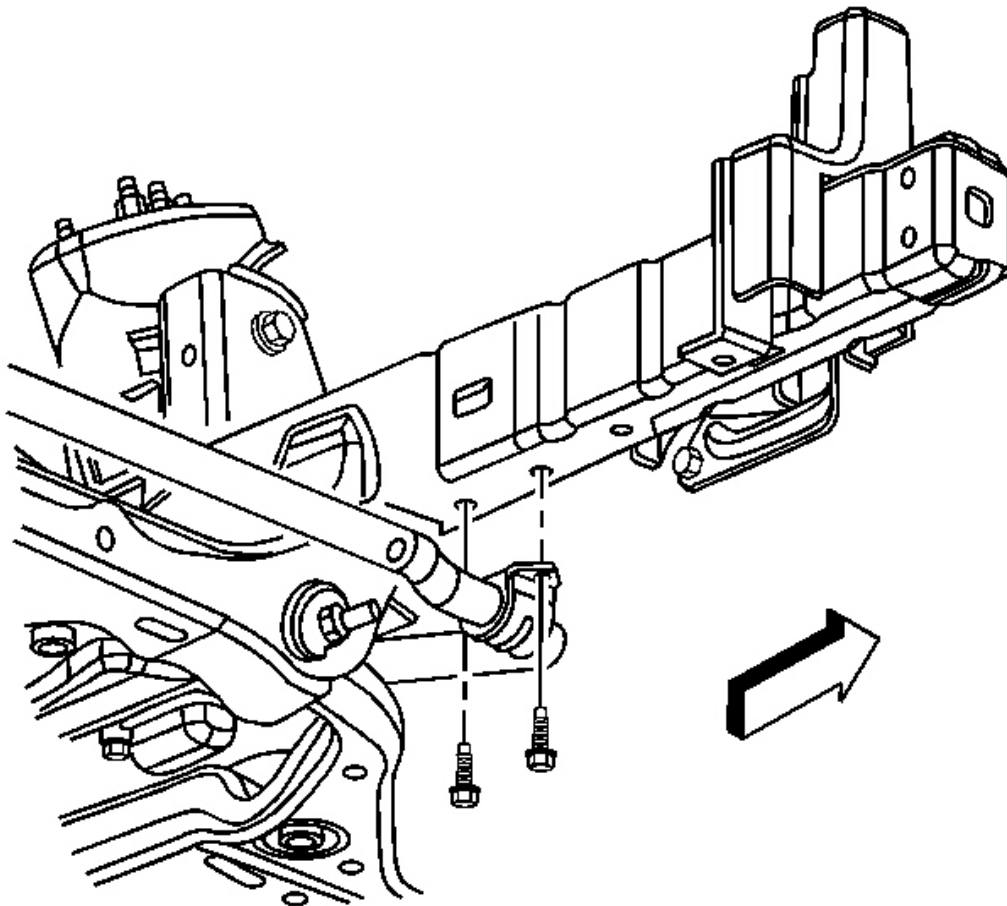


Fig. 8: View Of Insulator Clamp Bolts
Courtesy of GENERAL MOTORS CORP.

1. Install the insulators to the stabilizer shaft.
2. Install the clamps over the insulators and the stabilizer shaft.

NOTE: Refer to Fastener Notice .

3. Install insulator clamp bolts.

Tighten: Tighten the bolts to 50 N.m (37 lb ft).

4. Lower the vehicle.

LOWER CONTROL ARM BALL JOINT REPLACEMENT

Removal Procedure

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .
2. Remove the tire and wheel assembly. Refer to Tire and Wheel Removal and Installation .
3. Remove the lower control arm. Refer to Lower Control Arm Replacement.
4. Place the lower control arm in a bench vice.
5. Using a chisel, remove the securing crimps from the ball joint body, if equipped.
6. Using a press, remove the ball joint from the lower control arm.

Installation Procedure

IMPORTANT: Use the outer flange of the ball joint in order to press the ball joint into place.

1. Install the new ball joint using a press.
2. Place the lower control arm in a bench vice.
3. Using a punch, install crimps to the ball joint, if necessary. Use the replaced ball joint as a reference.
4. Install the lower control arm. Refer to Lower Control Arm Replacement.
5. Install the tire and wheel assembly. Refer to Tire and Wheel Removal and Installation .
6. Remove the safety stands.
7. Lower the vehicle.
8. Verify the wheel alignment. Refer to Wheel Alignment Measurement .

STEERING KNUCKLE REPLACEMENT

Tools Required

- **J 43631** Ball Joint Remover. See Special Tools.
- **J 6627-A** Ball Joint Separator.

Removal Procedure

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

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3

2. Remove the tire and wheel. Refer to **Tire and Wheel Removal and Installation** .
3. Support the lower control arm.
4. Remove the wheel drive shaft nut. Discard the nut.
5. Disconnect the wheel speed sensor harness from the chassis harness.
6. Disconnect the wheel speed sensor harness from inner fender panel.
7. Disconnect the outer tie rod from the steering knuckle. Refer to **Rack and Pinion Outer Tie Rod End Replacement** .

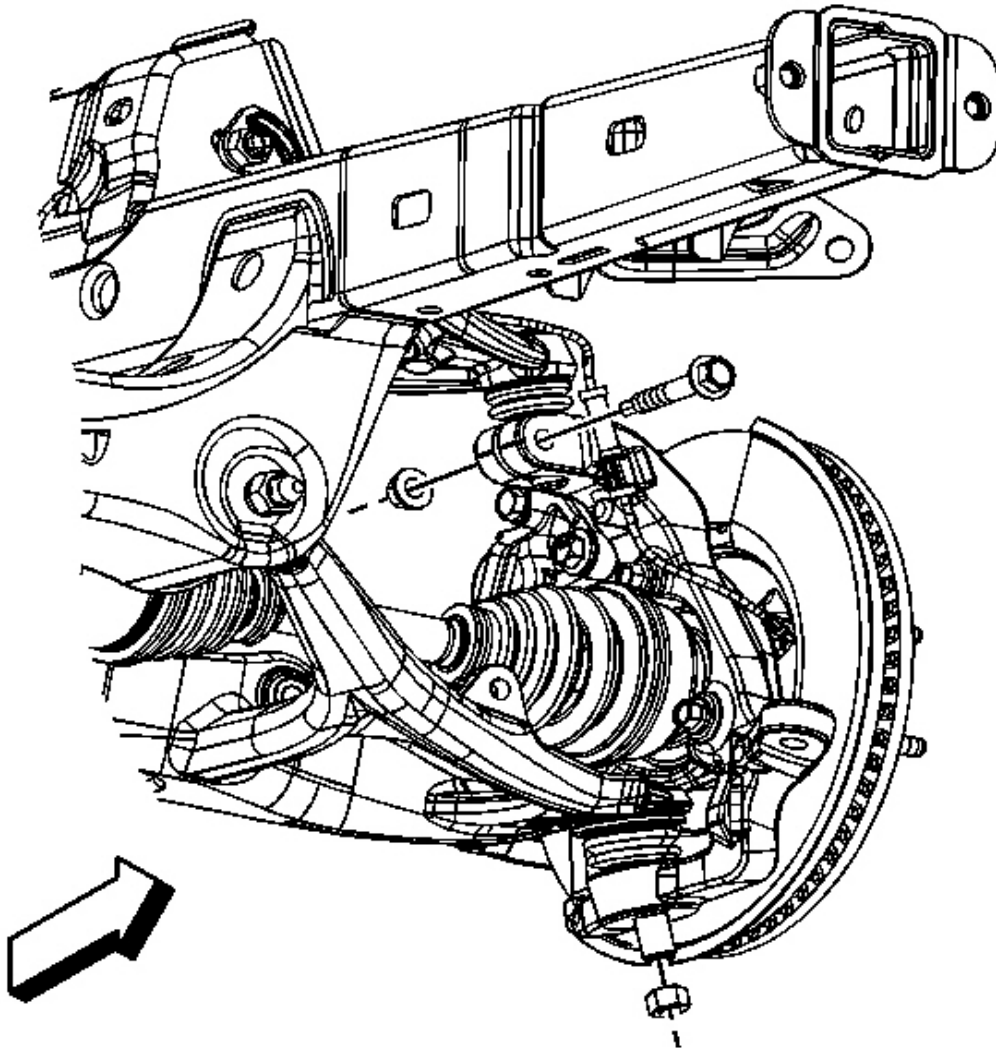


Fig. 9: Identifying Upper Control Arm Pinch Bolt & Lower Control Arm Retaining Nut

Courtesy of GENERAL MOTORS CORP.

8. Remove and discard the upper control arm pinch bolt and nut from the ball joint.
9. Remove and discard the lower control arm retaining nut.
10. Separate the lower ball joint from the steering knuckle using the **J 43631** . See **Special Tools**.

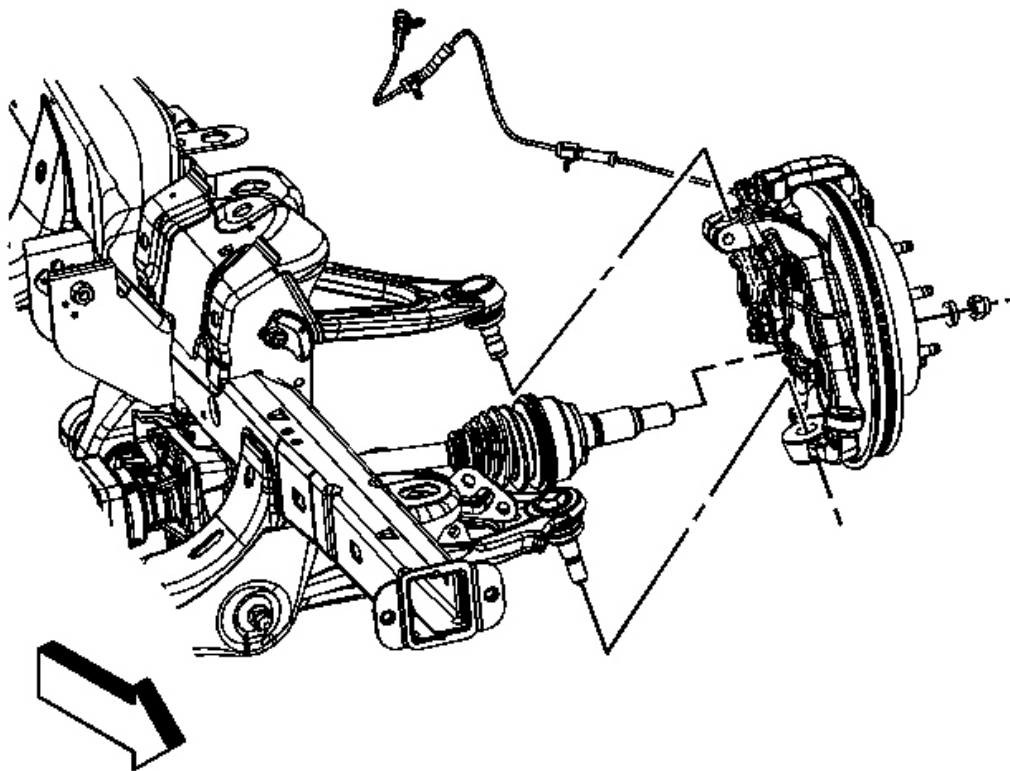


Fig. 10: Steering Knuckle Assembly
Courtesy of GENERAL MOTORS CORP.

11. Remove the steering knuckle assembly from the vehicle and set on a bench.
12. Remove the ball joint using the **J 6627-A** .
13. Remove the wheel hub and bearing assembly. Refer to **Front Wheel Hub, Bearing and Seal Replacement**.

Installation Procedure

1. Install the wheel hub and bearing assembly. Refer to **Front Wheel Hub, Bearing and Seal Replacement**.
2. Clean all grease and contaminants from the tapered section and the threads of the lower ball joint and the tie rod end.
3. Clean and inspect the taper holes and the mounting surfaces of the steering knuckle. If any

of the tapered holes are elongated, out of round or damaged, replace the steering knuckle.

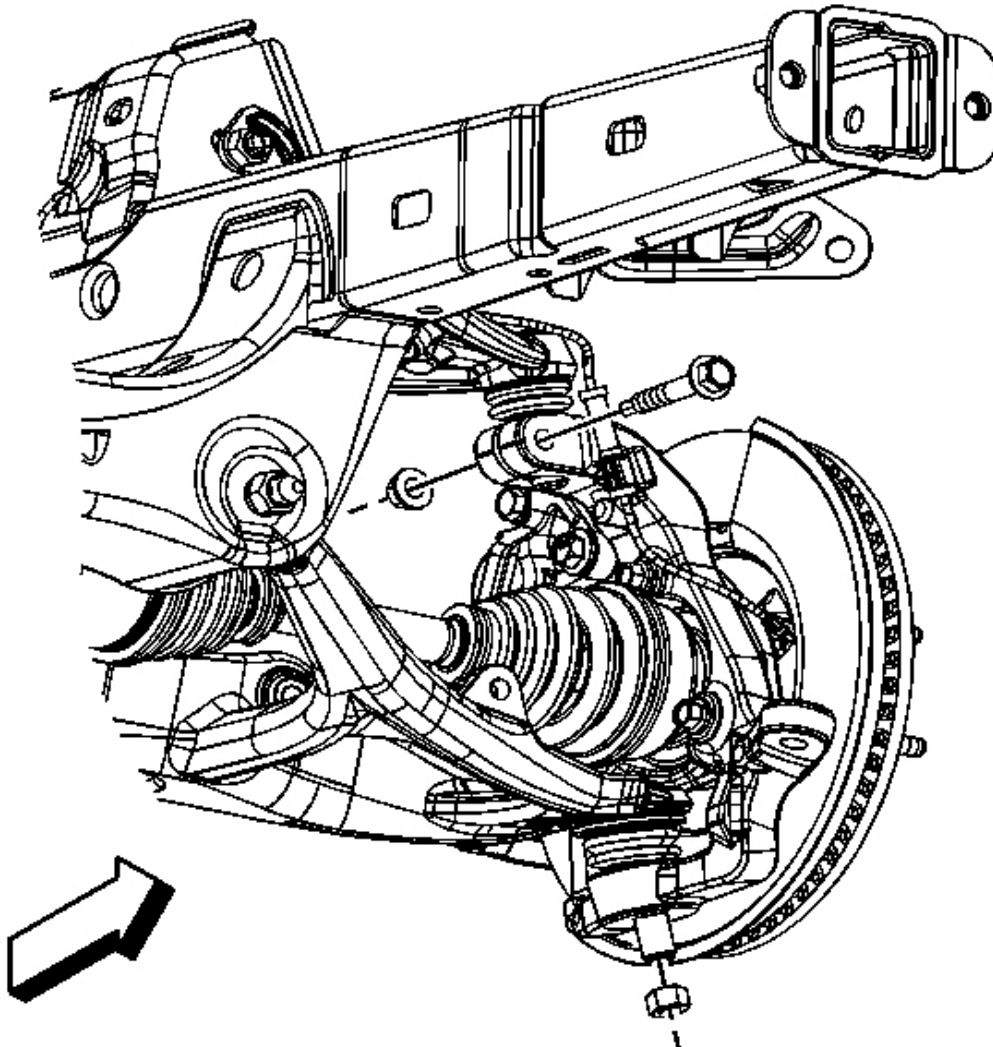


Fig. 11: Identifying Upper Control Arm Pinch Bolt & Lower Control Arm Retaining Nut

Courtesy of GENERAL MOTORS CORP.

NOTE: Refer to Fastener Notice .

4. Connect the lower ball joint to the steering knuckle and install the new retaining nut.

Tighten: Tighten the nut to 85 N.m (63 lb ft) plus 60 degrees.

5. Connect the upper ball joint to the steering knuckle and install the new pinch bolt and nut.

Tighten: Tighten the nut to 70 N.m (52 lb ft).

6. Connect the outer tie rod to the steering knuckle. Refer to **Rack and Pinion Outer Tie Rod End Replacement** .
7. Connect the wheel speed sensor harness to the chassis harness.
8. Connect the wheel speed sensor harness to inner fender panel.
9. Install the new wheel drive shaft nut. Refer to **Wheel Drive Shaft Replacement** .
10. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation** .
11. Remove the control arm support.
12. Lower the vehicle.
13. Verify the wheel alignment. Refer to **Wheel Alignment Specifications** .

UPPER CONTROL ARM REPLACEMENT

Tools Required

J 45938 Alignment Socket. See **Special Tools**.

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Remove the tire and wheel assembly. Refer to **Tire and Wheel Removal and Installation** .
3. Support the lower control arm at ride height.
4. Remove the wheel speed sensor bracket bolt.
5. Disconnect the wheel speed sensor brackets.
6. Disconnect the front brake hose from the upper control arm. Refer to **Front Brake Hose Replacement** .

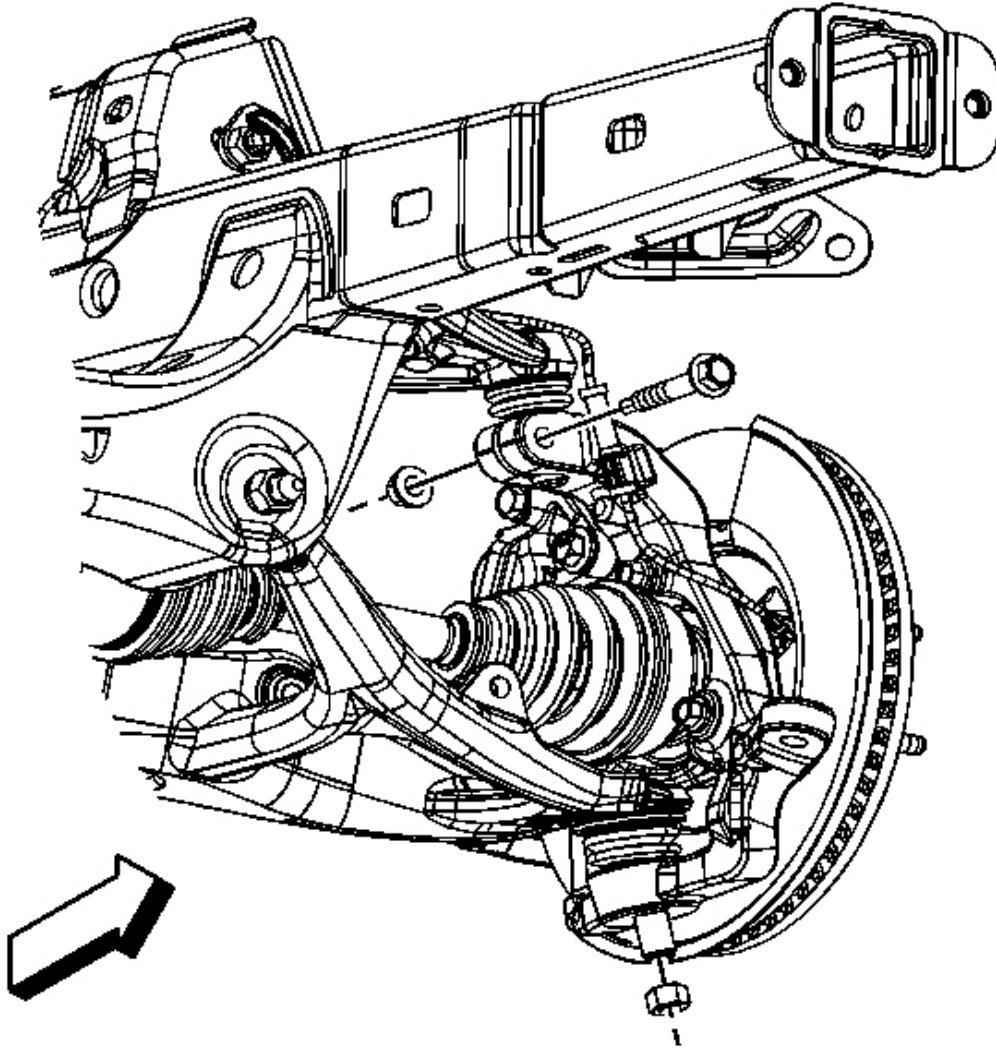


Fig. 12: Identifying Upper Control Arm Pinch Bolt & Lower Control Arm Retaining Nut
Courtesy of GENERAL MOTORS CORP.

7. Disconnect the upper control arm from the ball stud by removing the pinch bolt.

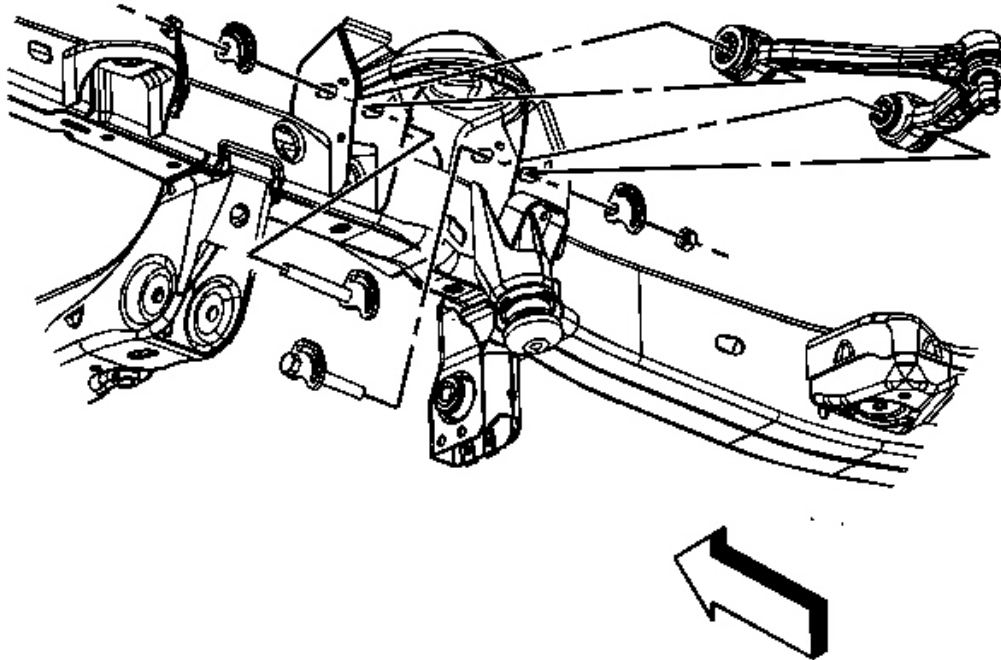


Fig. 13: Upper Control Arm Nuts And The Adjustment Cams
Courtesy of GENERAL MOTORS CORP.

8. Remove the upper control arm nuts and the adjustment cams.
9. Remove the upper control arm bolts.
10. Remove the upper control arm.

Installation Procedure

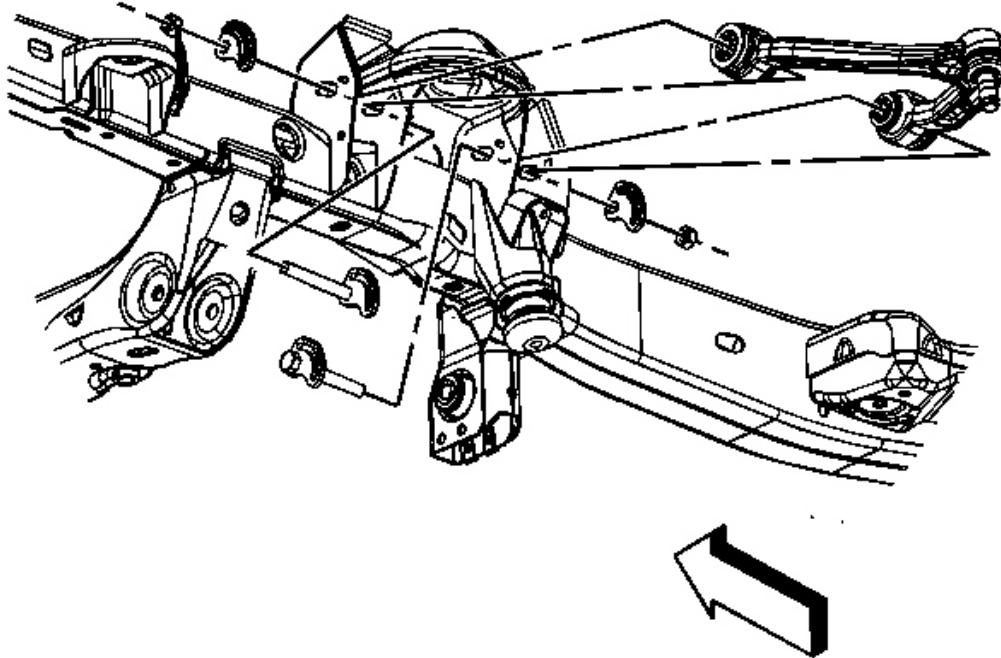


Fig. 14: Upper Control Arm Nuts And The Adjustment Cams
Courtesy of GENERAL MOTORS CORP.

1. Install the upper control arm.

NOTE: Refer to Fastener Notice .

2. Install the upper control arm nuts and the adjustment cams. Do not tighten.

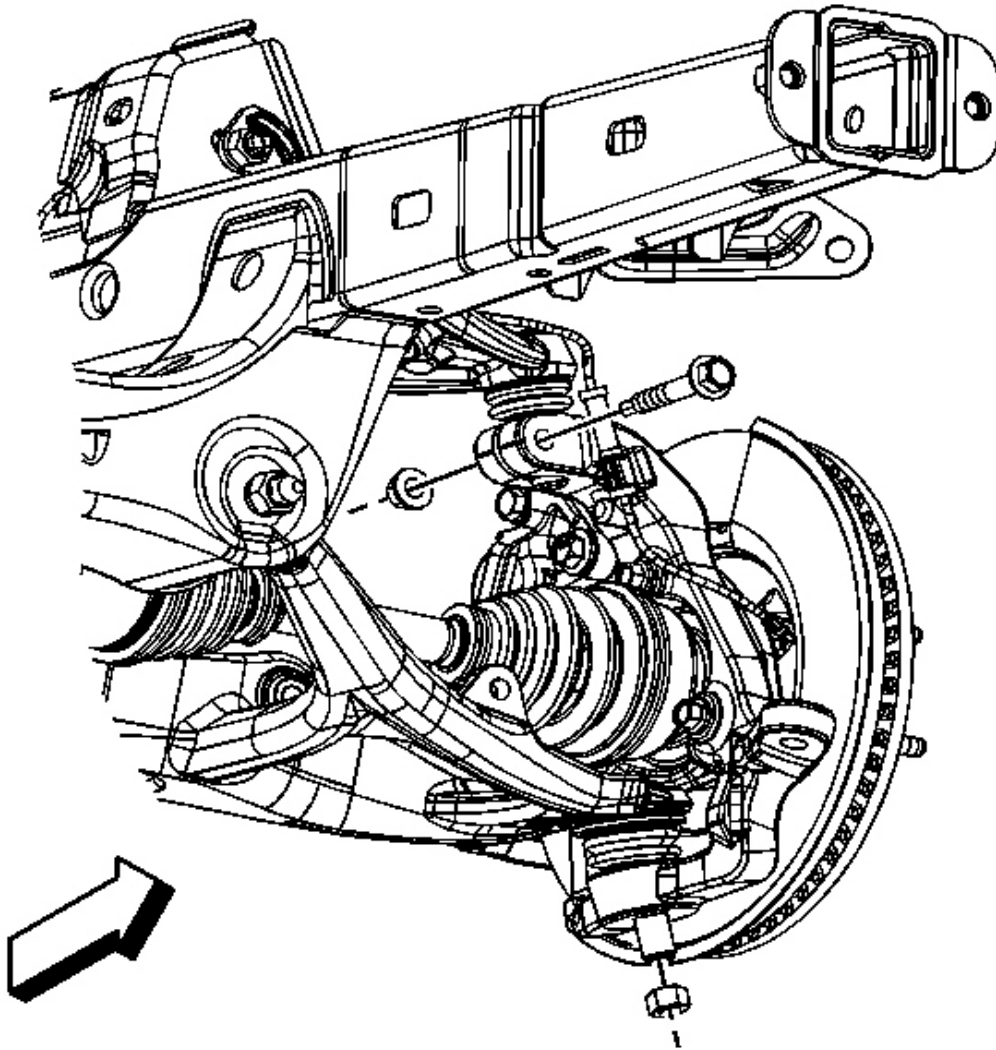


Fig. 15: Identifying Upper Control Arm Pinch Bolt & Lower Control Arm Retaining Nut
Courtesy of GENERAL MOTORS CORP.

3. Connect the upper control arm to the ball stud by installing the pinch bolt.

Tighten: Tighten the nut to 70 N.m (51 lb ft).

4. Connect the wheel speed sensor brackets.

5. Install the wheel speed sensor bracket bolt.

Tighten: Tighten the nut to 20 N.m (15 lb ft).

6. Connect the front brake hose to the upper control arm. Refer to **Front Brake Hose Replacement** .
7. Install the tire and wheel assembly. Refer to **Tire and Wheel Removal and Installation** .
8. Remove the lower control arm support.
9. Lower the vehicle.
10. With the vehicle at ride height, tighten the upper control arm nuts.

Tighten: Using the **J 45938** , tighten the nuts to 155 N.m (114 lb ft).

11. Verify the wheel alignment. Refer to **Wheel Alignment Specifications** .

LOWER CONTROL ARM REPLACEMENT

Tools Required

J 43631 Ball Joint Remover/Installer. See **Special Tools**.

Removal Procedure

1. Raise and support the vehicle. Refer to **Lifting and Jacking the Vehicle** .
2. Remove the steering knuckle. Refer to **Steering Knuckle Replacement**.
3. Remove the stabilizer shaft links from the lower control arm. Refer to **Stabilizer Shaft Link Replacement**.
4. Remove the shock absorber nut and through bolt. Refer to **Shock Absorber Replacement**.
5. Remove the torsion bar as necessary. Refer to **Torsion Bar Replacement**.

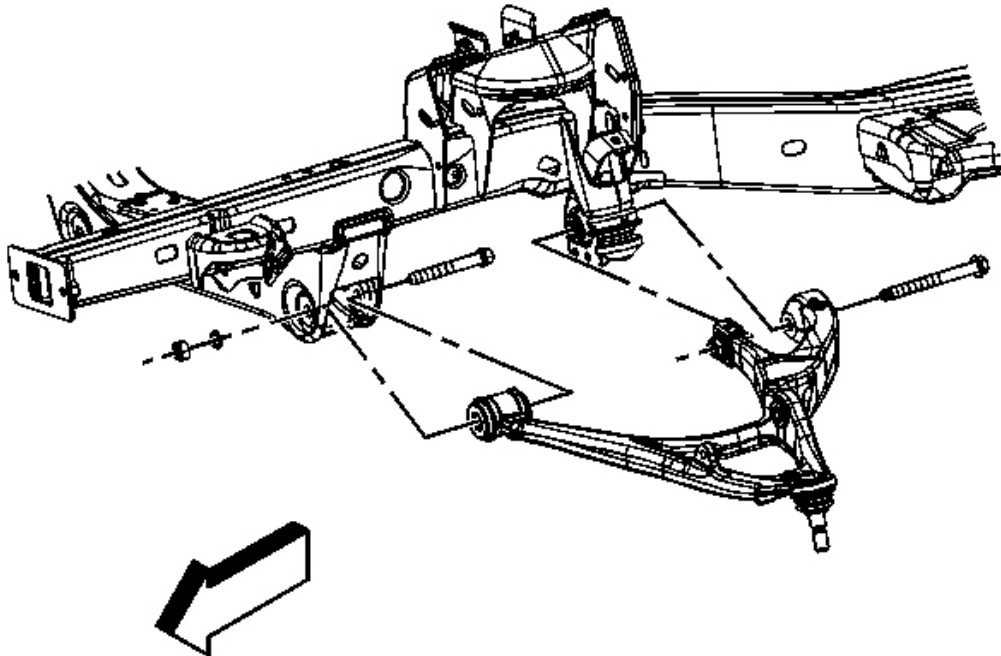


Fig. 16: Identifying Lower Control Arm
Courtesy of GENERAL MOTORS CORP.

6. Remove the lower control arm nuts and the washers.
7. Remove the lower control arm bolts.
8. Remove the lower control arm.

Installation Procedure

1. Install the lower control arm.

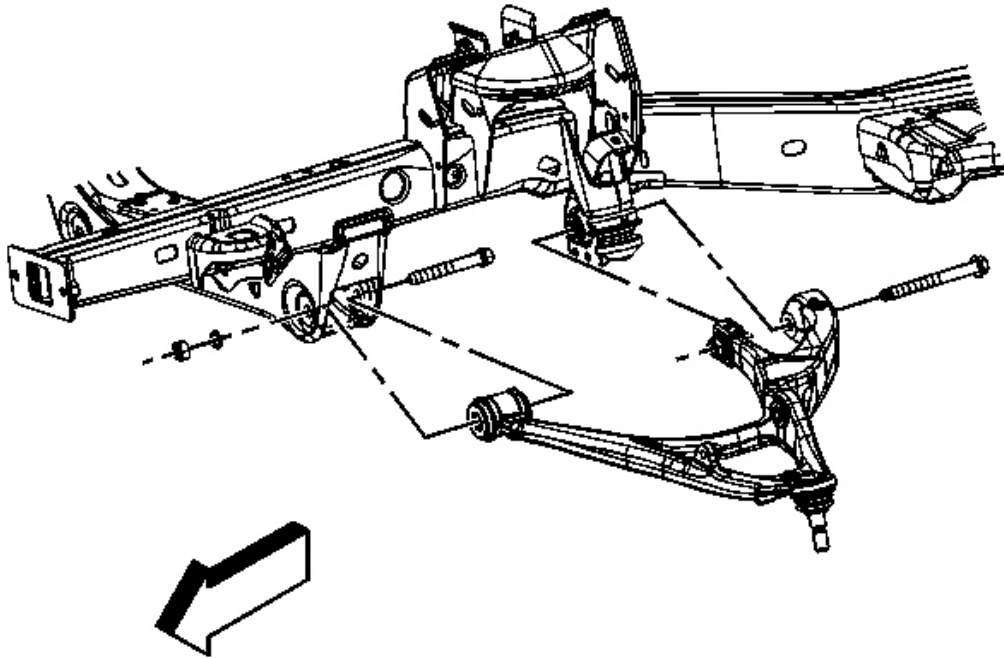


Fig. 17: Identifying Lower Control Arm
Courtesy of GENERAL MOTORS CORP.

2. Install the lower control arm bolts.

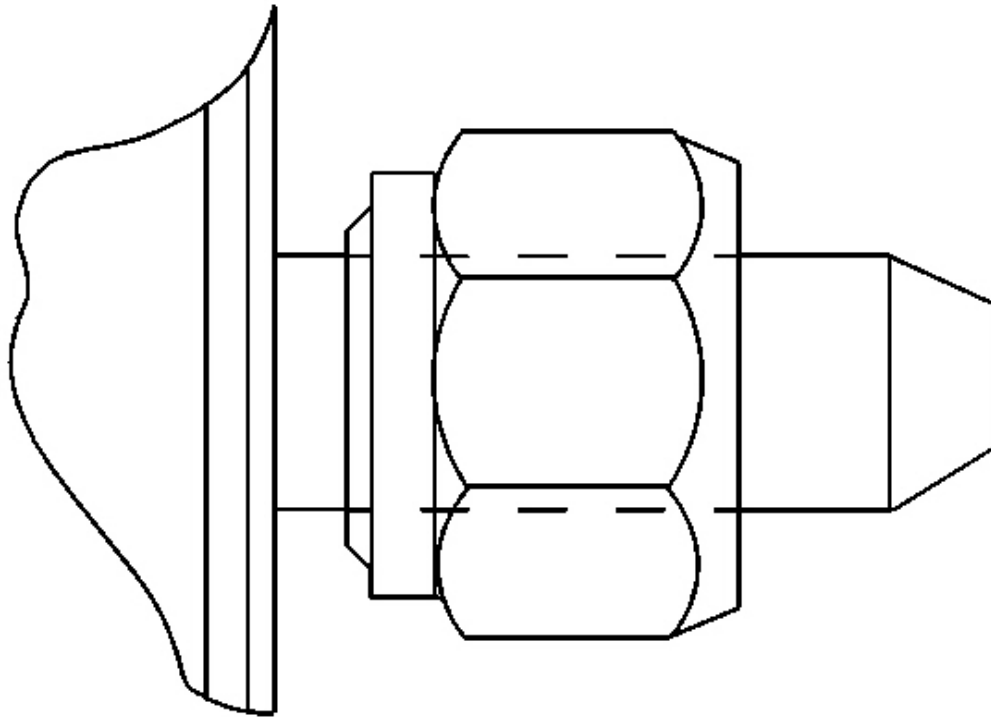


Fig. 18: Positioning Lower Control Arm Washer Shoulder (4WD)
Courtesy of GENERAL MOTORS CORP.

3. Install the washer (front bolt only) with the shoulder facing the control arm.

NOTE: Refer to **Fastener Notice** .

4. Install the lower control arm nuts. Do not tighten.
5. Install the steering knuckle. Refer to **Steering Knuckle Replacement**.
6. Install the torsion bar. Refer to **Torsion Bar Replacement**.
7. Install the shock absorber through bolt and nut. Refer to **Shock Absorber Replacement**.
8. Install the stabilizer shaft links to the lower control arm. Refer to **Stabilizer Shaft Link Replacement**.
9. Lower the vehicle.

IMPORTANT: The fasteners must be tightened in sequence. Tighten the rear nut first then the front nut.

10. With the vehicle at ride height, tighten the lower control arm nuts.

Tighten:

1. Tighten the rear nut to 180 N.m (133 lb ft).
2. Tighten the front nut to 165 N.m (122 lb ft).

FRONT LOWER CONTROL ARM BUSHING REPLACEMENT

Tools Required

J 41805 Ball Joint Remover/Installer. See **Special Tools**.

Removal Procedure

1. Remove the front drive axle, if equipped. Refer to **Differential Carrier Assembly Replacement** .
2. Remove the lower control arm. Refer to **Lower Control Arm Replacement**.

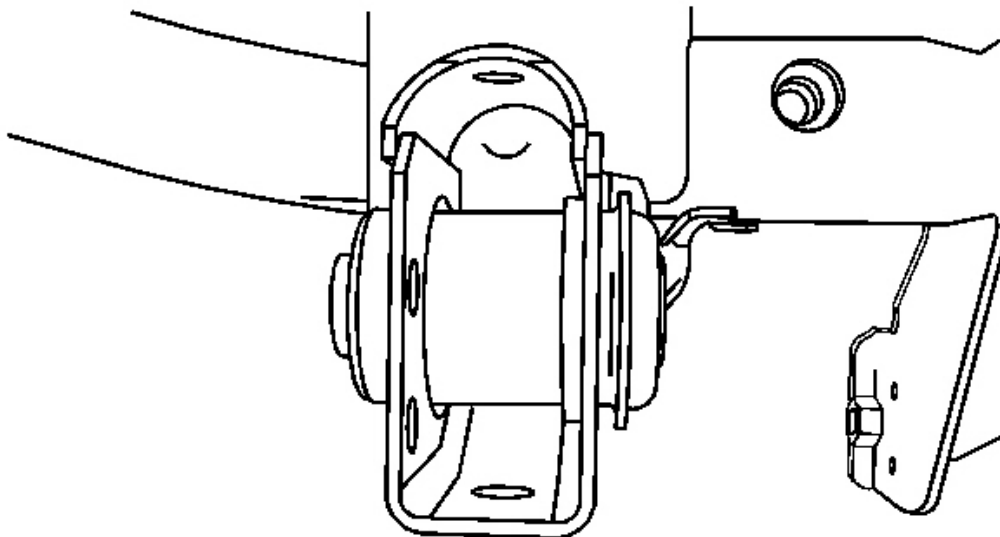


Fig. 19: View Of Rear Bushing
Courtesy of GENERAL MOTORS CORP.

3. Before removing the bushing, measure and record the distance from the bushing flange to the bracket. This will be the distance that the new bushing will be installed to.

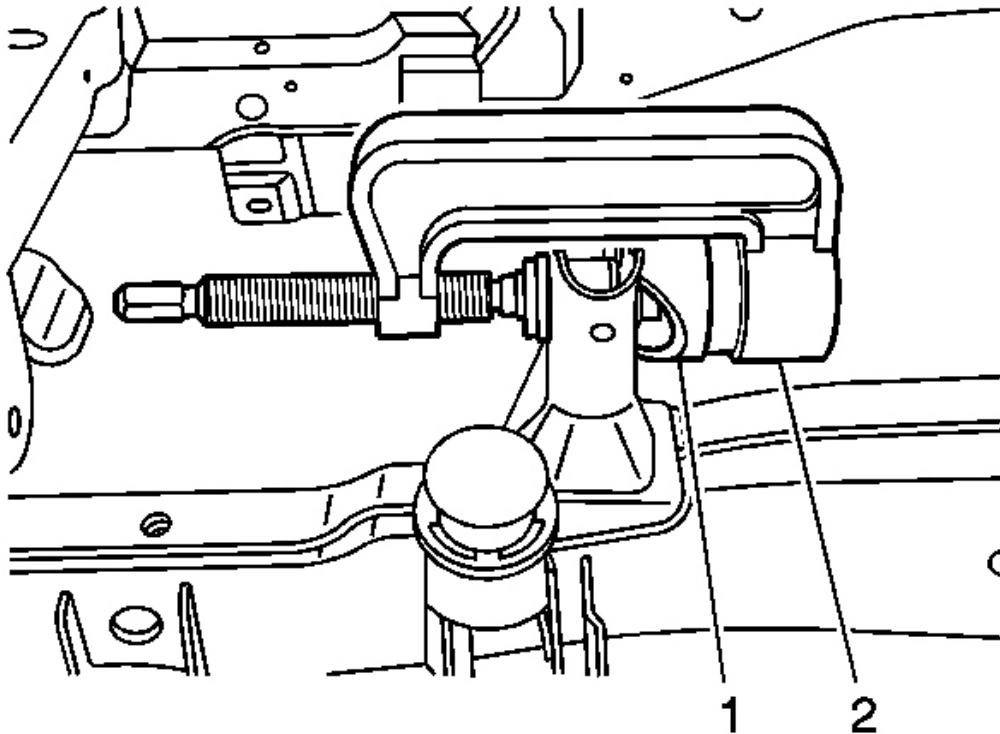


Fig. 20: Identifying J 41805
Courtesy of GENERAL MOTORS CORP.

4. Using the **J 41805** (1), remove the rear bushing.

Installation Procedure

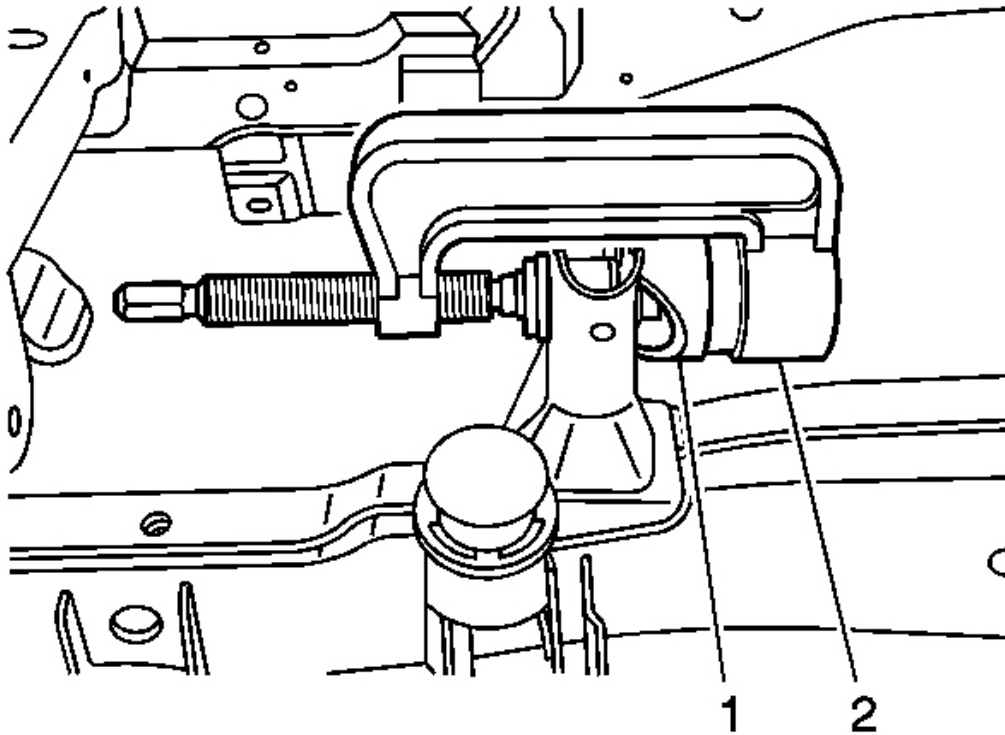


Fig. 21: Identifying J 41805
Courtesy of GENERAL MOTORS CORP.

1. Using the **J 41805** (1), install the rear bushing.

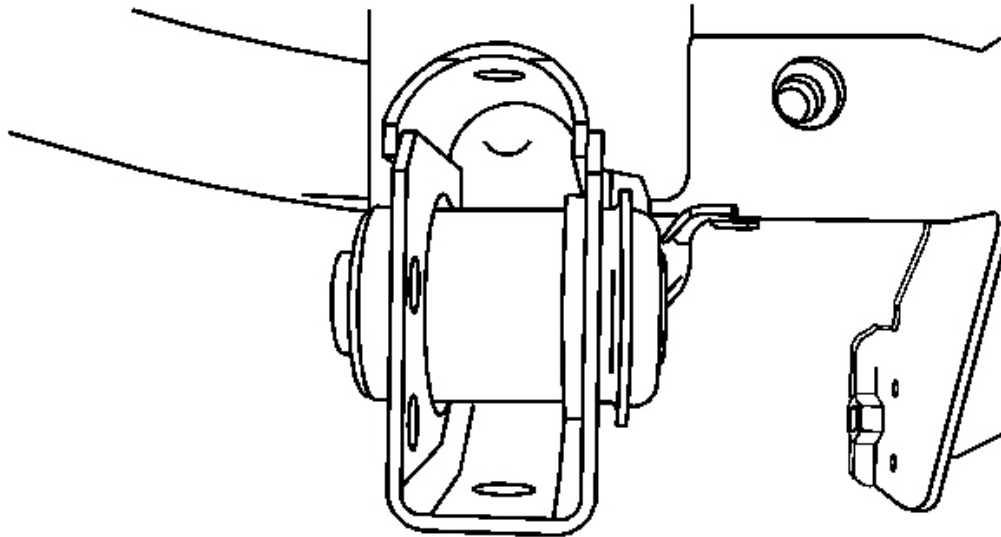


Fig. 22: View Of Rear Bushing
Courtesy of GENERAL MOTORS CORP.

2. Install the rear bushing to the predetermined measurement taken earlier.
3. Install the lower control arm. Refer to **Lower Control Arm Replacement**.
4. Install the front drive axle, if equipped. Refer to **Differential Carrier Assembly Replacement** .

SPRING BUMPER REPLACEMENT

Removal Procedure

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

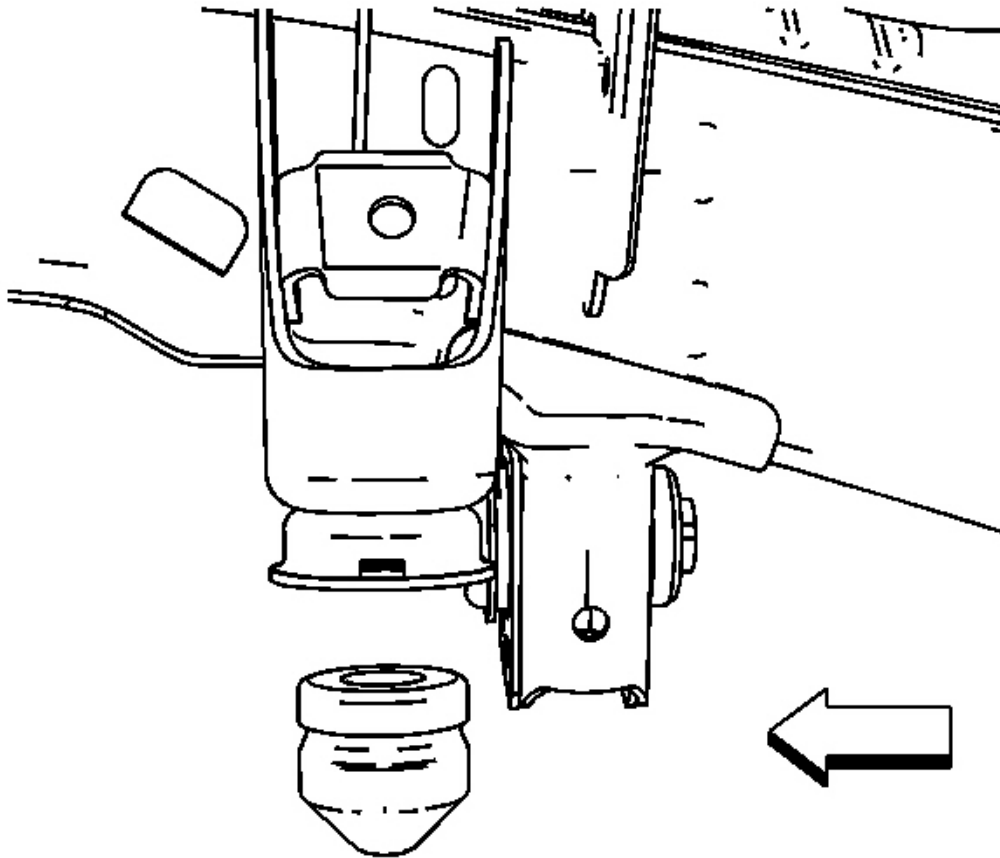


Fig. 23: View Of Jounce Bumper - 4WD
Courtesy of GENERAL MOTORS CORP.

2. Remove the jounce bumper.

Installation Procedure

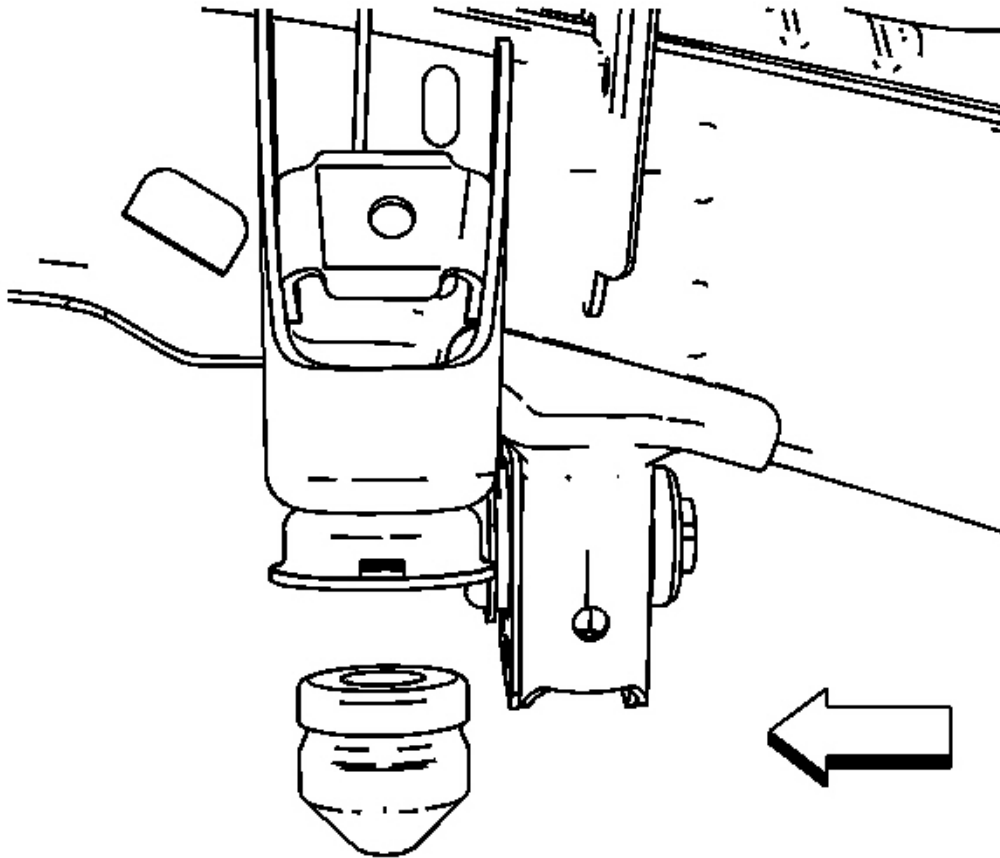


Fig. 24: View Of Jounce Bumper - 4WD
Courtesy of GENERAL MOTORS CORP.

1. Install the jounce bumper.
2. Lower the vehicle.

WHEEL STUD REPLACEMENT

Tools Required

J 43631 Ball Joint Remover. See 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 .
3. Remove the brake rotor. Refer to Front Brake Rotor Replacement .

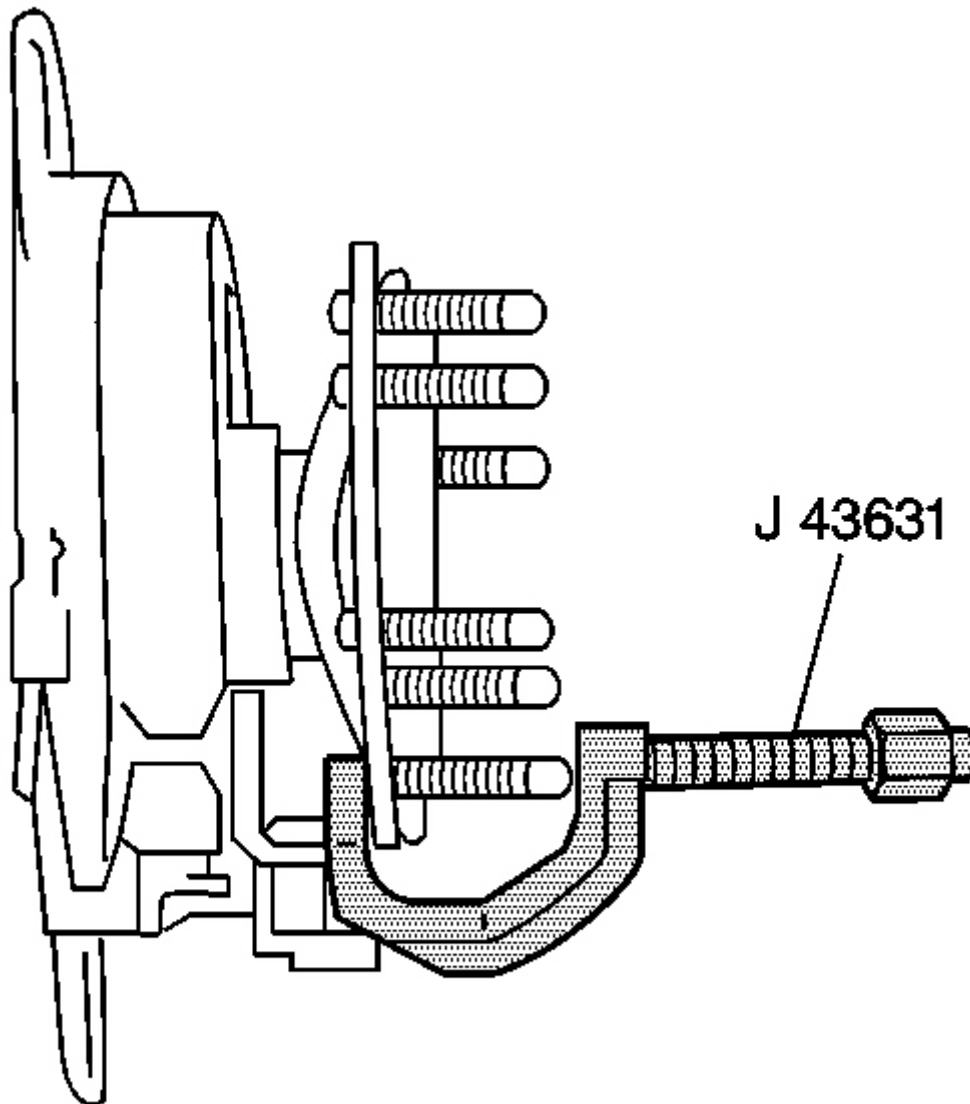


Fig. 25: Removing Wheel Stud From Hub Flange
Courtesy of GENERAL MOTORS CORP.

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

Installation Procedure

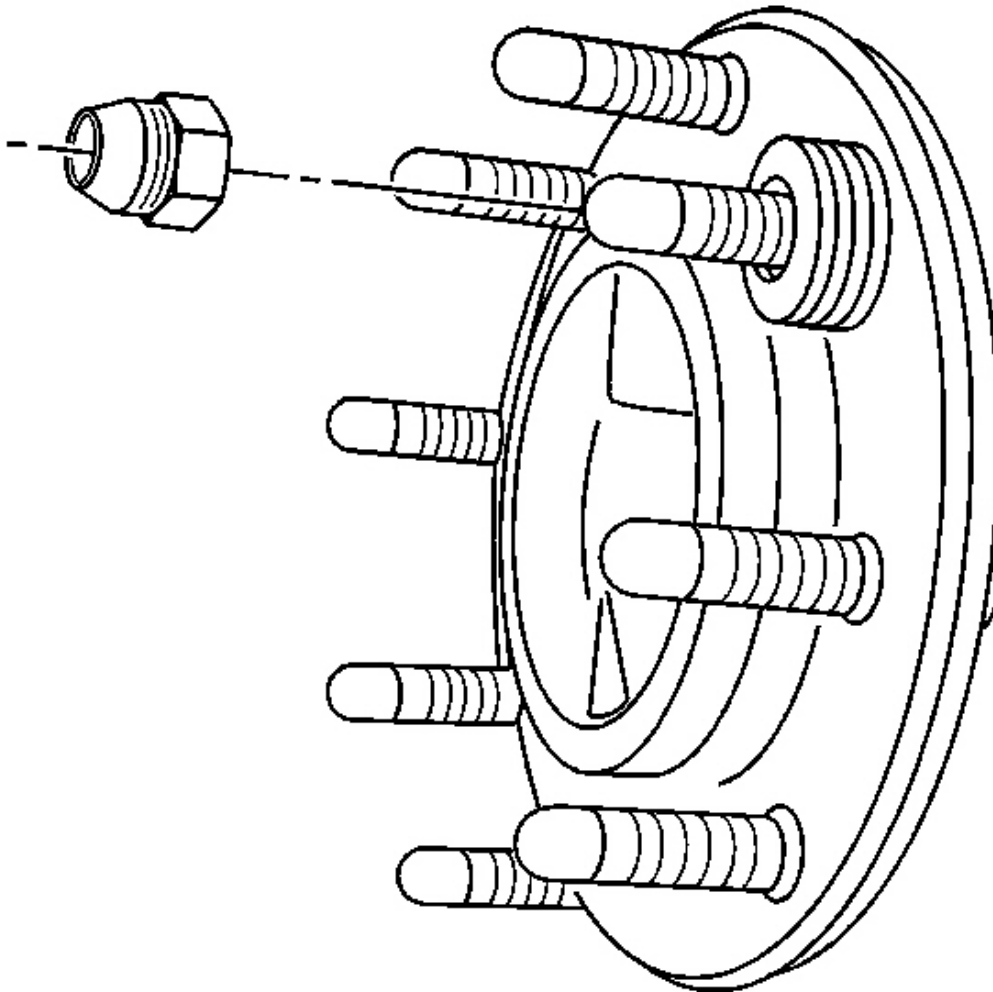


Fig. 26: View Of Wheel Studs, Hub & Rotor Assembly - Rear (W/Dual Wheels)
Courtesy of GENERAL MOTORS CORP.

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.
5. Remove the wheel nut.
6. Remove the washers.
7. Install the brake rotor. Refer to **Front Brake Rotor Replacement** .
8. Install the tire and wheel. Refer to **Tire and Wheel Removal and Installation** .
9. Remove the safety stands.
10. Lower the vehicle.

FRONT WHEEL HUB, BEARING AND SEAL REPLACEMENT

Removal Procedure

NOTE: Never place vehicle on the ground with the halfshaft removed or the halfshaft nut torqued improperly. Otherwise, bearing seals may become dislodged causing premature wear and/or damage to the hub and bearing assembly.

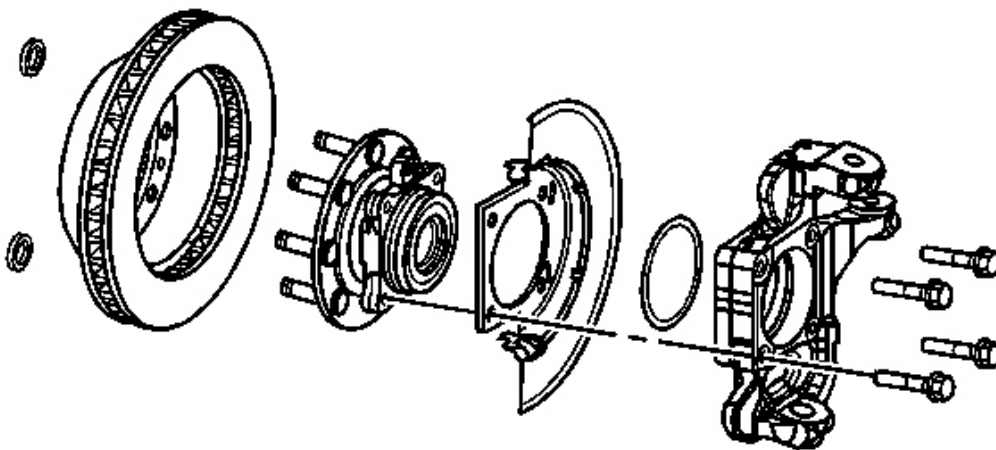


Fig. 27: View Of Brake Rotor (25/35 Series)
Courtesy of GENERAL MOTORS CORP.

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** .
3. Remove the rotor. Refer to **Front Brake Rotor Replacement** .
4. Remove the wheel speed sensor. Refer to **Front Wheel Speed Sensor Replacement** .
5. Remove the retaining nut and washer for the wheel drive shaft.

IMPORTANT: For the following service step, the wheel drive shaft does not have to be removed from the vehicle, just reposition to gain access to the mounting bolts for the wheel hub.

6. Remove the wheel driveshaft from the wheel hub and bearing.
7. Remove the wheel hub and bearing mounting bolts.
8. Remove the wheel hub and bearing and splash shield from the vehicle.

Installation Procedure

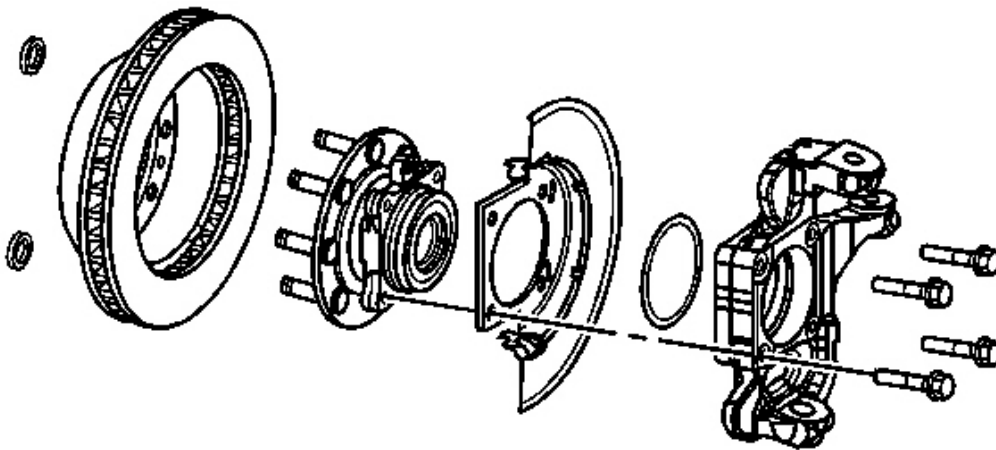


Fig. 28: View Of Brake Rotor (25/35 Series)
Courtesy of GENERAL MOTORS CORP.

1. Clean all corrosion or contaminants from the steering knuckle bore and the hub and bearing assembly.
2. Lubricate the steering knuckle bore with wheel bearing grease or the equivalent.

3. Install the wheel hub and bearing and splash shield in the steering knuckle.

NOTE: Refer to Fastener Notice .

4. Install the wheel hub and bearing mounting bolts.

Tighten: Tighten the wheel hub to knuckle bolts to 180 N.m (133 lb ft).

5. Install the wheel drive shaft in the steering knuckle.
6. Install the nut and washer retaining the wheel drive shaft assembly.

Tighten: Tighten the nut to 235 N.m (173 lb ft).

7. Install the wheel speed sensor. Refer to Front Wheel Speed Sensor Replacement .
8. Install the rotor. Refer to Front Brake Rotor Replacement .
9. Install the tire and wheel. Refer to Tire and Wheel Removal and Installation .

TORSION BAR REPLACEMENT

Removal Procedure

NOTE: 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.

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .
2. Allow the front suspension to hang in the rebound position.
3. Mark the adjuster bolt.

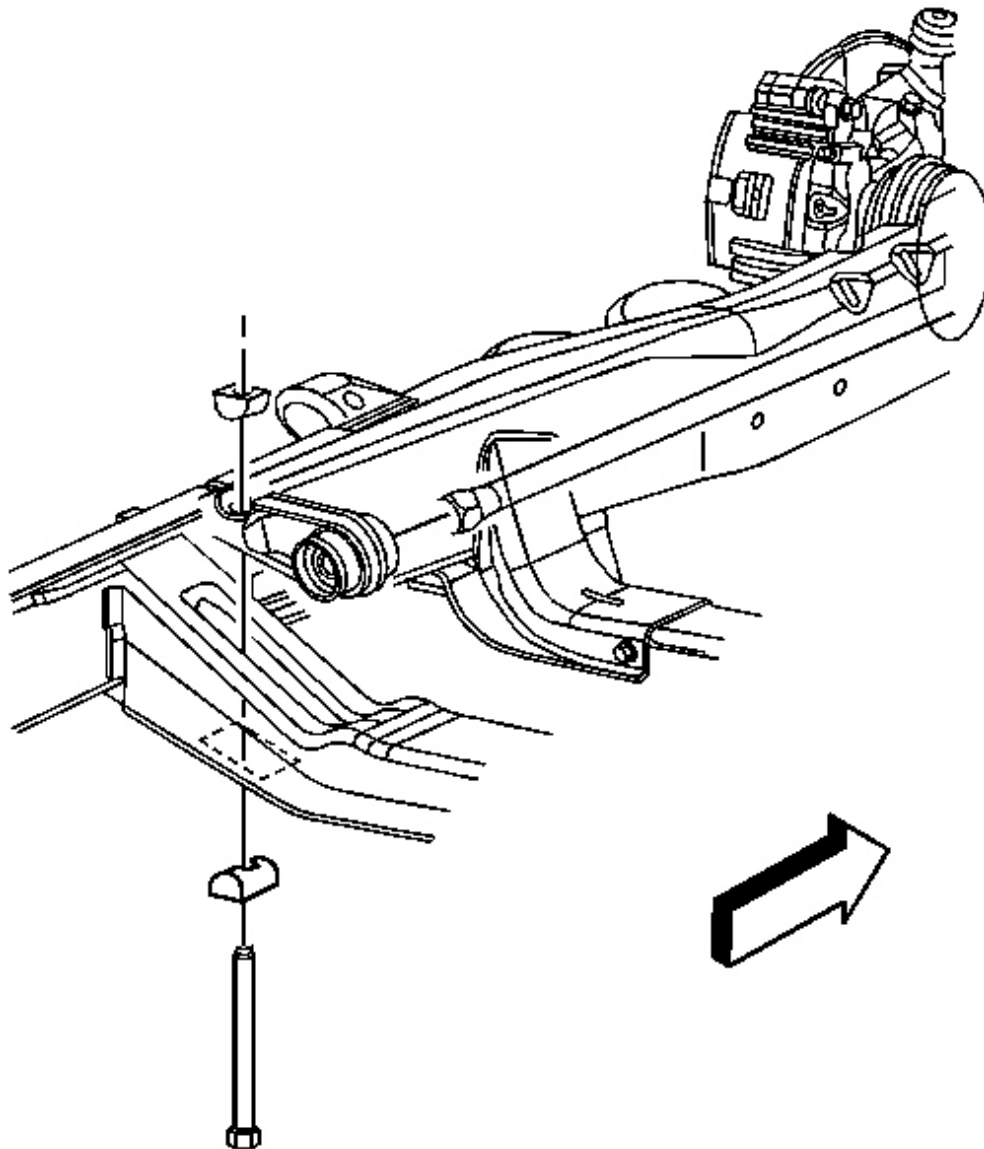


Fig. 29: View Of Adjuster Bolt & Spacer
Courtesy of GENERAL MOTORS CORP.

IMPORTANT: To aid in re-assembly record the number of turns that are required to remove the adjuster bolt.

4. Remove the adjuster bolt, spacer and adjuster nut.

IMPORTANT: Take note that the torsion bars are specific to the left and right sides of the vehicle.

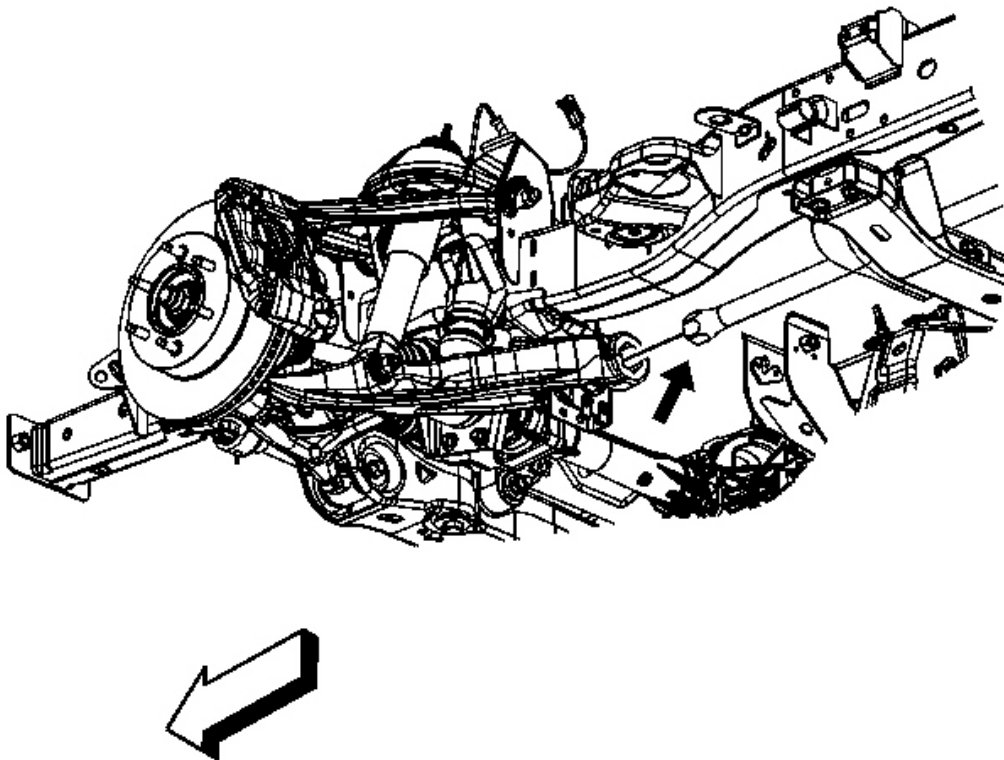


Fig. 30: Torsion Bar
Courtesy of GENERAL MOTORS CORP.

5. Remove the adjustment arms and torsion bars as a unit, moving it rearward to disengage the lower control arm.

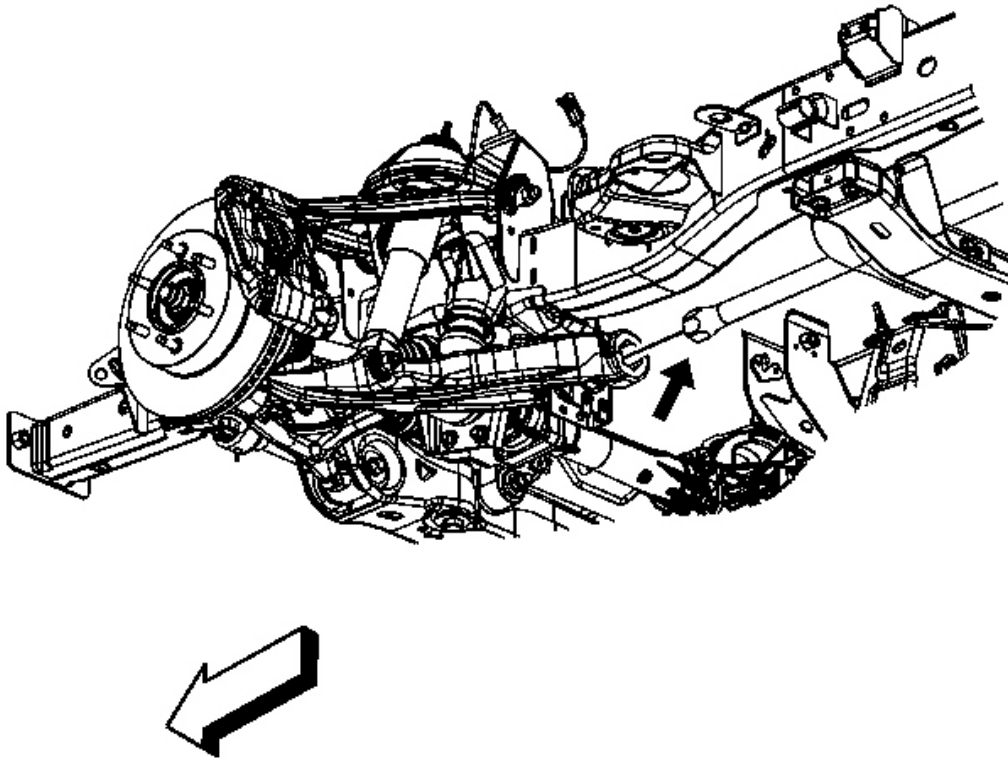


Fig. 31: Identifying Torsion Bar
Courtesy of GENERAL MOTORS CORP.

1. Install the adjustment arms and torsion bars in relation to where the bars were removed.
2. Install the adjustment arm to the torsion bar and slide the torsion bar forward until the torsion bar fully engages the lower control arm.

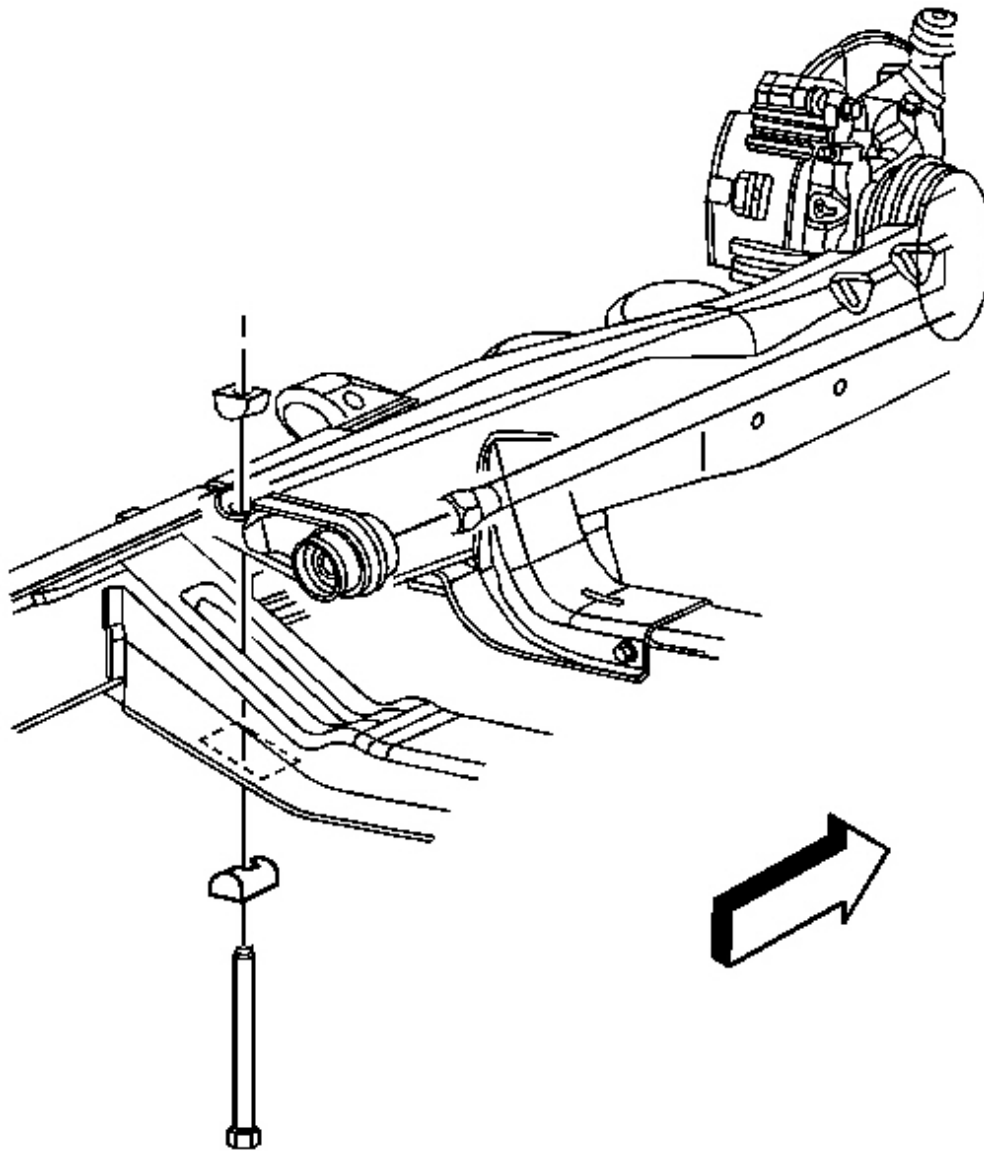


Fig. 32: View Of Adjuster Bolt & Spacer
Courtesy of GENERAL MOTORS CORP.

3. Install the adjuster bolt, spacer and adjuster nut.
4. Lower the vehicle.

5. Check the Z-Height. Refer to Trim Height Specifications .

SHOCK ABSORBER REPLACEMENT

Removal Procedure

NOTE: The front shock absorbers of the vehicle are multifunctional. In addition to contributing to a smooth ride they also provide the only stop to the front suspension when fully extended. Therefore, when servicing the shock absorber, service replacement shock absorbers must be equivalent to original shock absorbers in both extended length and strength. Use of shocks not complying to original equipment or strength could result in suspension over-travel or shock breakage. Suspension over-travel may result in suspension component breakage.

1. Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .
2. Support the lower control arm with a suitable stand.
3. Hold the tennon end with a wrench while removing the nut.

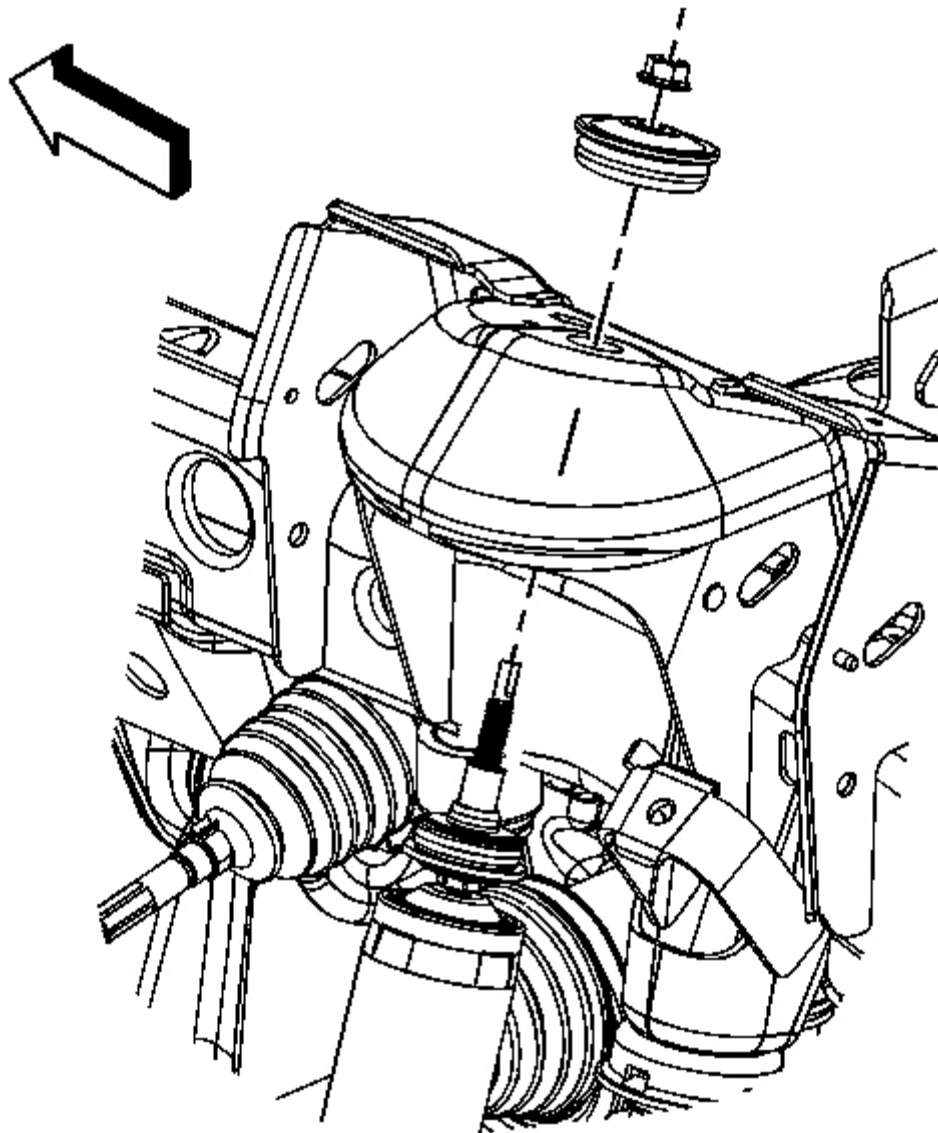


Fig. 33: Identifying Shock Absorber Upper Mount
Courtesy of GENERAL MOTORS CORP.

4. Remove the nut.

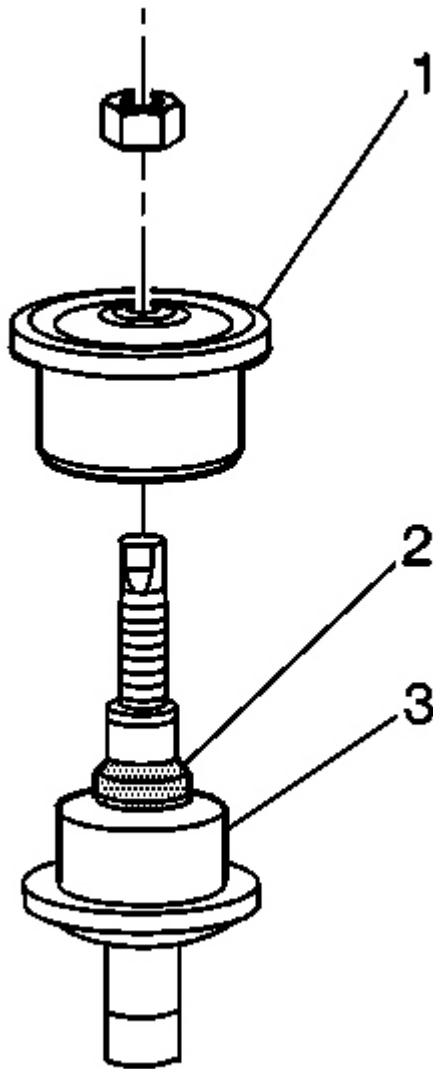


Fig. 34: Removing The Upper Insulator (4WD)
Courtesy of GENERAL MOTORS CORP.

5. Remove the upper insulator (1). Do not discard the plastic pilot ring (2).

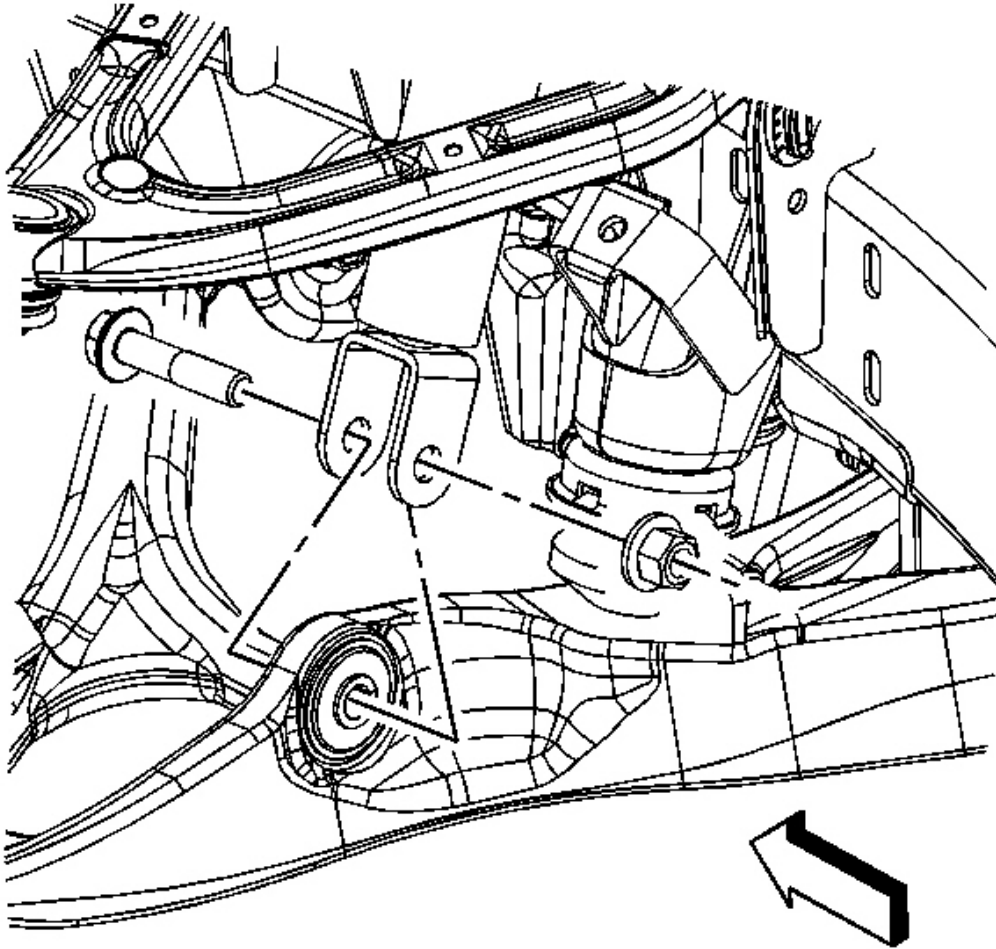


Fig. 35: Identifying Shock Absorber Lower Mount
Courtesy of GENERAL MOTORS CORP.

6. Remove the shock absorber mounting bolts at the lower control arm.
7. Remove the shock absorber through the lower control arm from below.

Installation Procedure

1. Support the lower control arm with a suitable jack in order to align the tennon with the mounting hole.
2. Install the shock absorber through the lower control arm from below. Insert the tennon

through the mounting hole in the upper spring pocket.

3. Align the shock absorber with the mounting holes in the lower control arm.

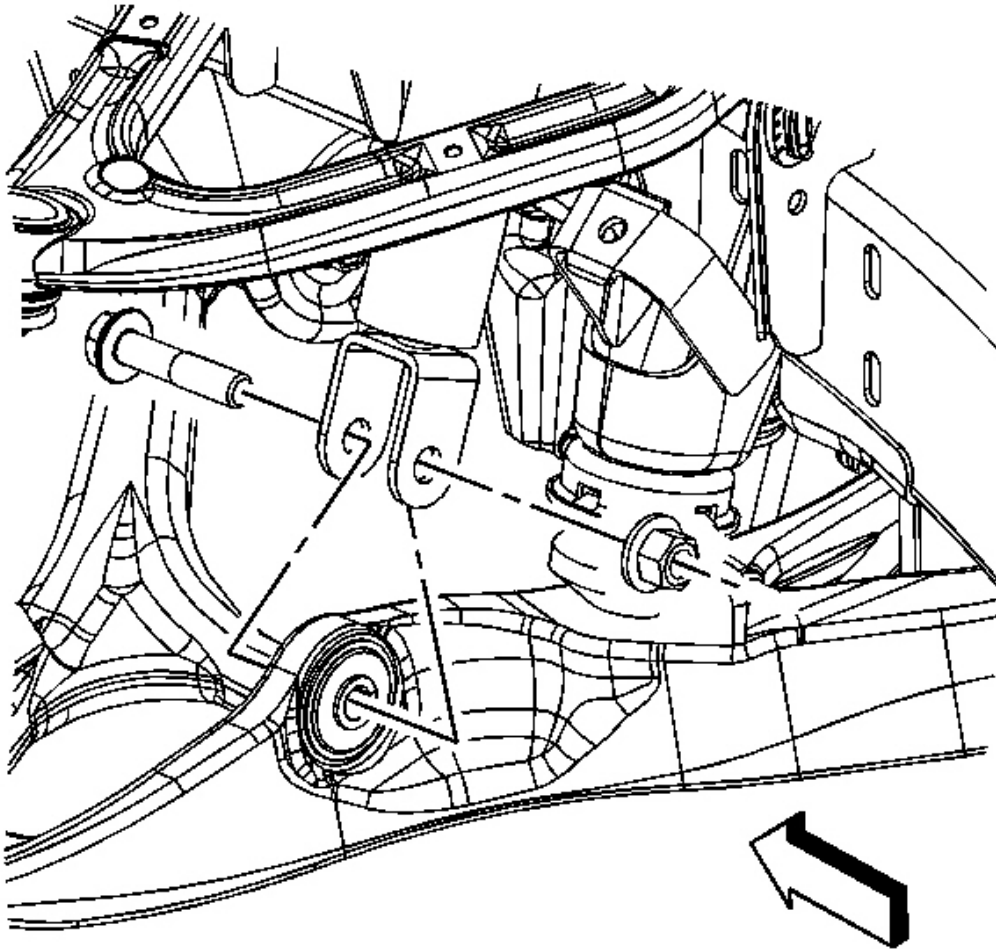


Fig. 36: Identifying Shock Absorber Lower Mount
Courtesy of GENERAL MOTORS CORP.

NOTE: Refer to Fastener Notice .

4. Install the shock absorber mounting bolts to the lower control arm.

Tighten: Tighten the bolts to 80 N.m (59 lb ft).

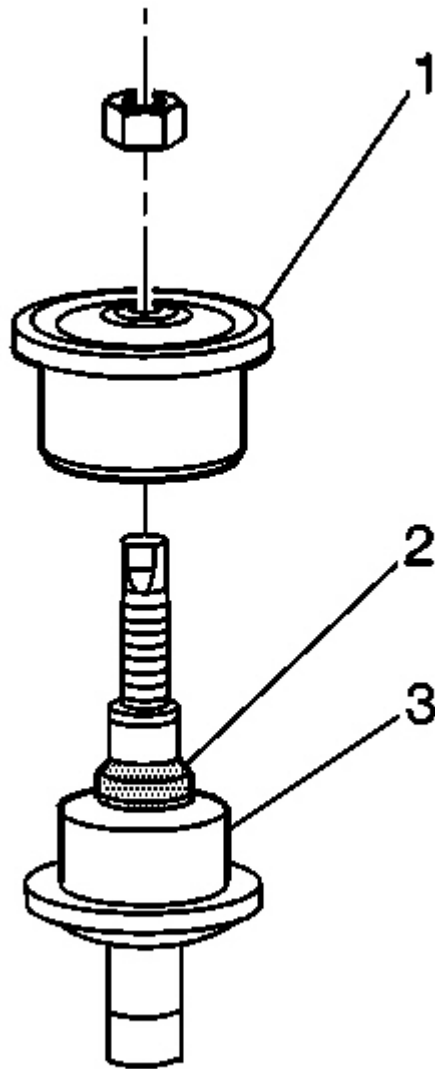


Fig. 37: Removing The Upper Insulator (4WD)

Courtesy of GENERAL MOTORS CORP.

IMPORTANT: The upper insulator (1) must be installed above the shock mounting bracket on the frame. The plastic pilot ring (2) will assist the alignment of the isolators.

5. Install the upper insulator to the shock absorber.

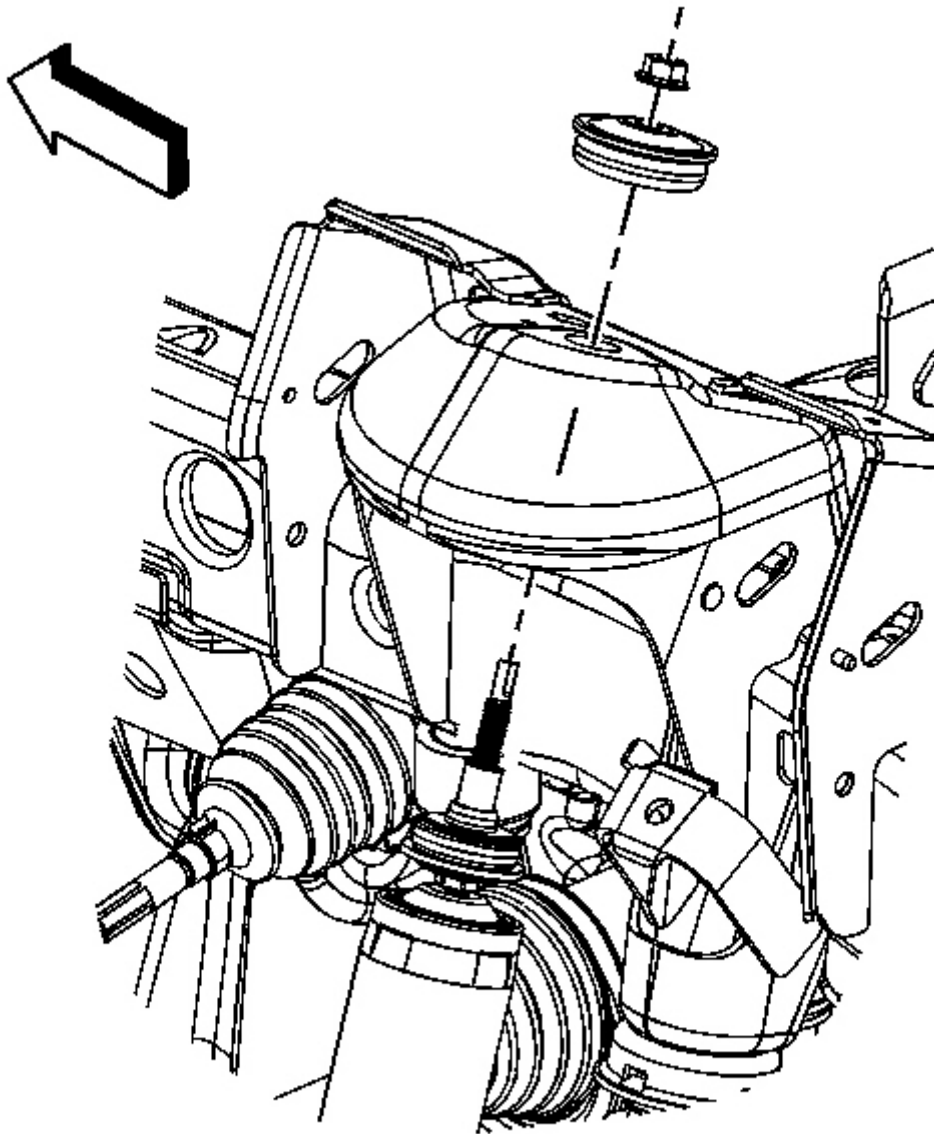


Fig. 38: Identifying Shock Absorber Upper Mount
Courtesy of GENERAL MOTORS CORP.

6. Install the nut to the tennon end.

7. Hold the tennon end with a wrench while torquing the nut.

Tighten: Tighten the nut to 27 N.m (20 lb ft).

8. Remove the support stand.

9. Lower the vehicle

FRONT SHOCK ABSORBER LOWER INSULATOR REPLACEMENT

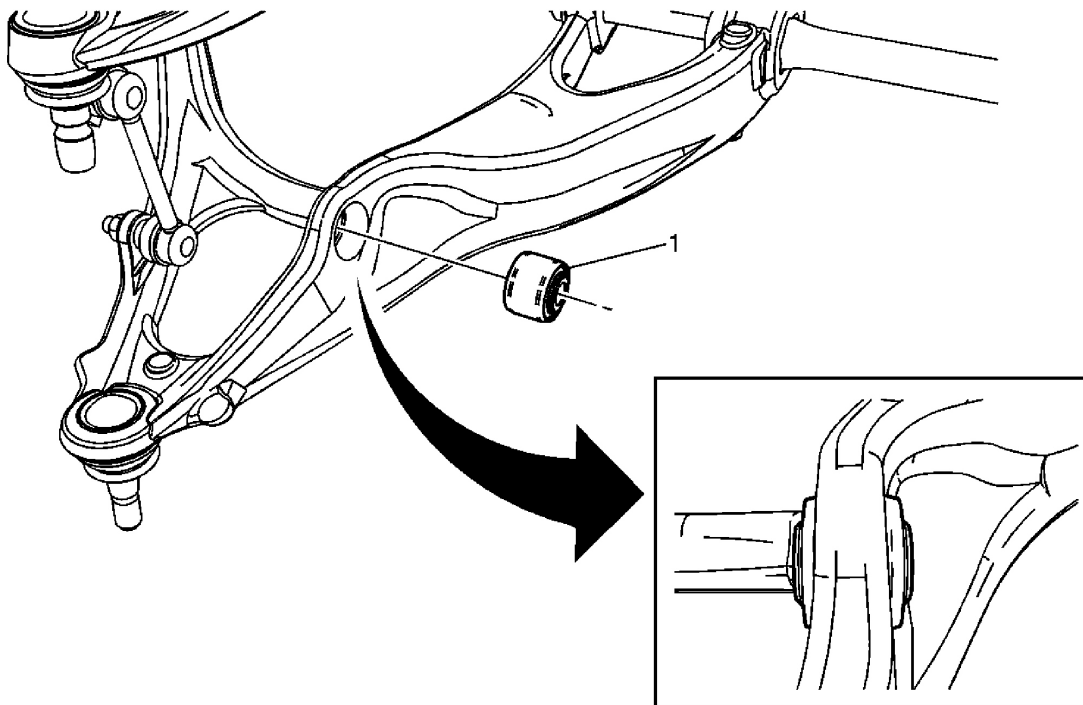


Fig. 39: View Of Front Shock Absorber Lower Insulator
 Courtesy of GENERAL MOTORS CORP.

Front Shock Absorber Lower Insulator Replacement

Callout	Component Name
Preliminary Procedures	
1.	Raise and support the vehicle. Refer to <u>Lifting and Jacking the Vehicle</u> .
2.	Remove the tire and wheel. Refer to <u>Tire and Wheel Removal and Installation</u> .
3.	Remove the steering knuckle. Refer to <u>Steering Knuckle Replacement</u> .
4.	Remove the wheel drive shaft. Refer to <u>Wheel Drive Shaft Replacement</u> .

5. Remove the shock absorber. Refer to **Shock Absorber Replacement**.

Front Shock Absorber Lower Insulator

Tip:

1

- Use **J 21474-01** Control Arm Bushing Set to remove and install the insulator.
- The insulator design is shoulderless and can be driven through the lower control arm too far in either direction. When installing the insulator, make sure the insulator is centered in the lower control arm with equal amounts protruding from each side of the arm when installed.

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.

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.

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3

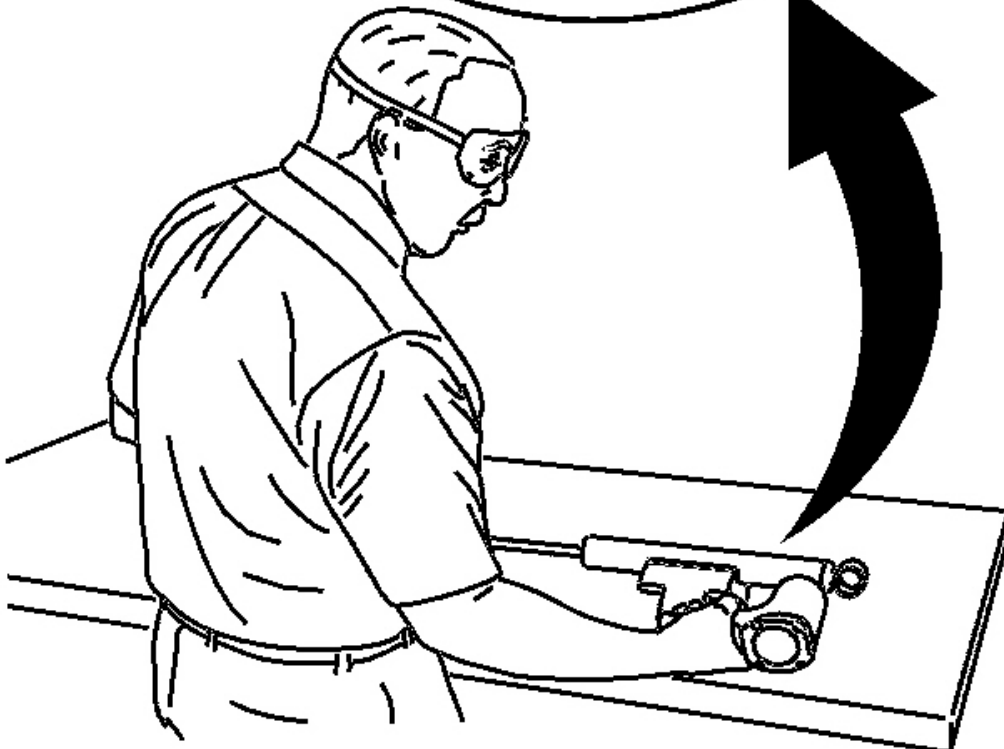
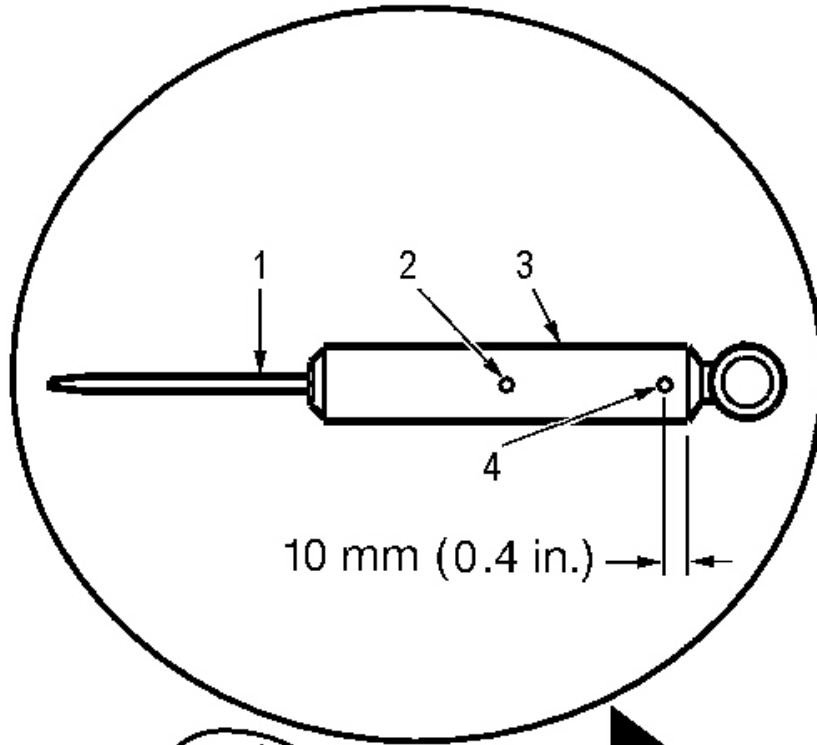


Fig. 40: Drilling Hole In Shock Absorber At Centerpunched Locations
Courtesy of GENERAL MOTORS CORP.

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.

DESCRIPTION AND OPERATION

GENERAL DESCRIPTION

All models have a front suspension that consists of the following components:

- Upper and lower control arms
- Stabilizer shaft
- Shock absorbers
- Torsion bars (right and left side)

The stabilizer shaft controls the side roll of the vehicle. This shaft is mounted in rubber insulators that are held to the frame with a bracket. The ends of the stabilizer shaft connect to the lower control arms with insulator assemblies.

The upper ball stud assembly is press fit into the upper control arm. The assembly attaches to the steering knuckle with a prevailing torque nut.

The upper ball studs are not replaceable.

The lower ball stud assembly is pressed into the outer end of the lower control arm. A prevailing

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3

torque nut joins the steering knuckle to the lower ball stud.

The upper and the lower control arms have pressed-in bushings. The bolts pass through the bushings and join the arms to the frame.

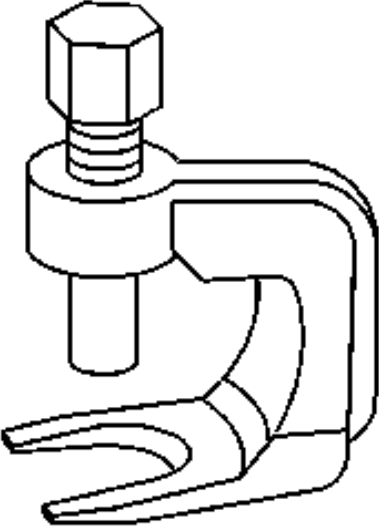
All ball studs have grease fittings.

All front wheel bearings are sealed. These bearings are pre-adjusted and need no lubrication.

SPECIAL TOOLS AND EQUIPMENT

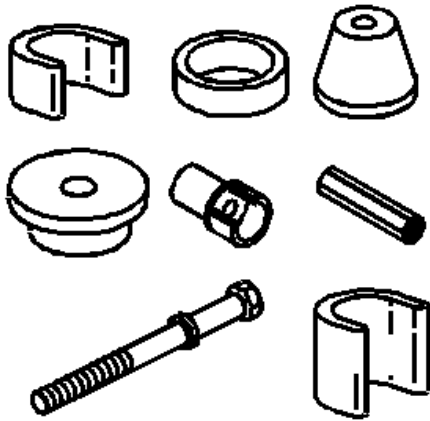
SPECIAL TOOLS

Special Tools

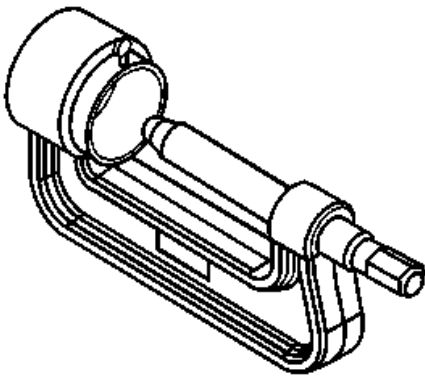
Illustration	Tool Number/Description
	<p data-bbox="967 1238 1263 1315">J 6627 Ball Joint Separator</p>

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3



J 21474-01
Control Arm Bushing Set

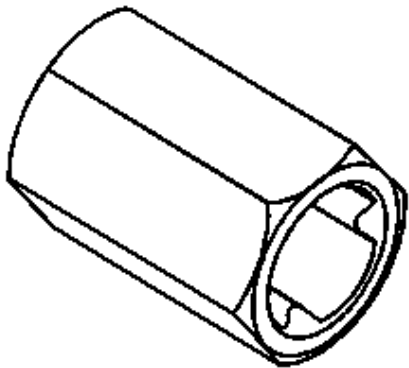
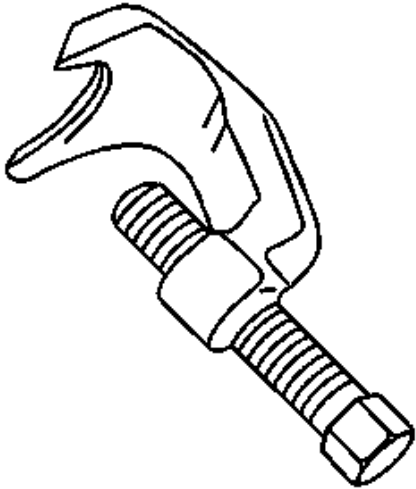


J 41805
Ball Joint Remover/Installer

J 43631
Ball Joint Remover

2007 Hummer H3

2007 SUSPENSION Front Suspension - H3



J 45938
Alignment Socket