

Fastener Tightening Specifications

Application	Specification	
	Metric	English
Lower Control Arm Bolt	160 N·m	118 lb ft
Lower Control Arm to Support Assembly Bolt	110 N·m	81 lb ft
Lower Shock Absorber Bolt	110 N·m	81 lb ft
Park Brake Routing Bolt	12 N·m	106 lb in
Rear Brake Hose Bracket Nut/Bolt	12 N·m	106 lb in
Spring Jounce Bumper	58 N·m	43 lb ft
Stabilizer Link to Lower Control Arm Nut	15 N·m	11 lb ft
Stabilizer Link to Stabilizer Shaft Nut	50 N·m	37 lb ft
Stabilizer Shaft Clamp Bolt	70 N·m	52 lb ft
Support to Body Bolt	170 N·m	125 lb ft
Toe Link Bolt	160 N·m	118 lb ft
Toe Link to Knuckle Bolt	160 N·m	118 lb ft
Toe Link to Support Bolt	160 N·m	118 lb ft
Trailing Arm Bolt	110 N·m	81 lb ft
Trailing Arm Bracket to Body Bolt	110 N·m	81 lb ft
Trailing Arm Bracket to Knuckle Bolt	110 N·m	81 lb ft
Trailing Arm Bushing Bolt	160 N·m	118 lb ft
Upper Control Arm to Knuckle Bolt	160 N·m	118 lb ft
Upper Control Arm to Support Bolt	164 N·m	121 lb ft
Upper Shock Bolt	110 N·m	81 lb ft
Wheel Bearing/Hub Bolt	75 N·m	55 lb ft
Wheel Drive Shaft Nut - AWD	205 N·m	151 lb ft

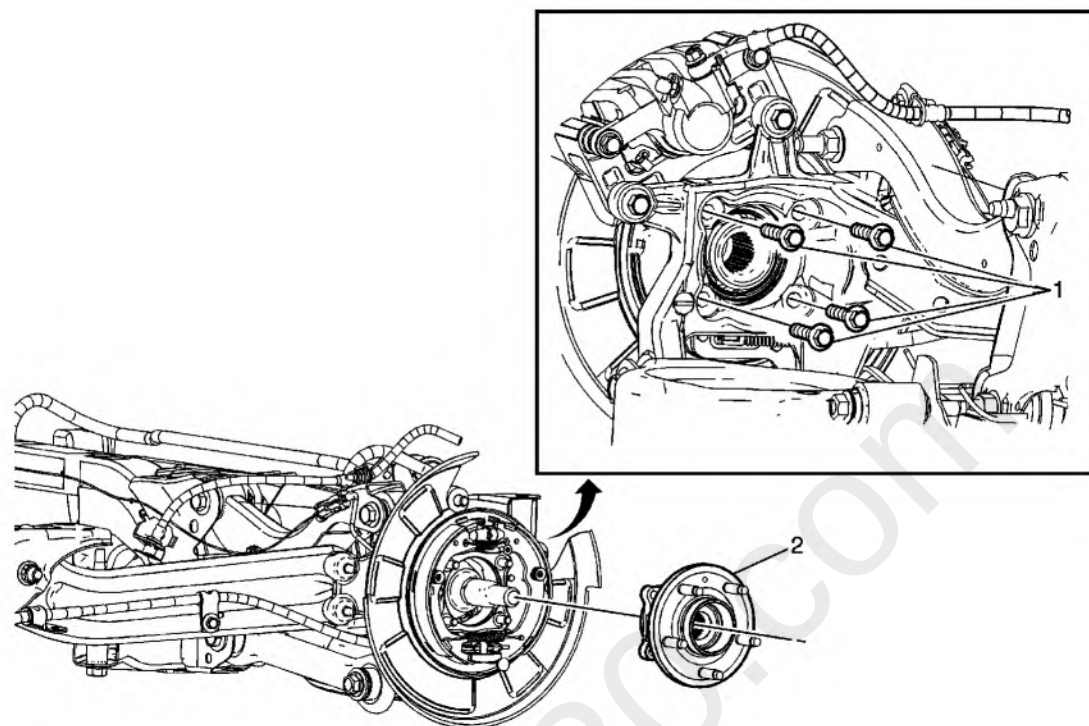
[2009 Chevrolet Equinox](#) | [Equinox, Torrent \(VIN L\) Service Manual](#) | [Suspension](#) | [Rear Suspension](#) | [Specifications](#) |

Document ID: 2165371

Adhesives, Fluids, Lubricants, and Sealers

Application	Type of Material	GM Part Number	
		US	Canada
Front and Rear Wheel Bearing/Hub Mounting Bolts	Thread Locker©	89021297	10953488

Rear Wheel Bearing and Hub Replacement



Callout	Component Name
Preliminary Procedures	
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 caliper bracket. Refer to Rear Brake Caliper Bracket Replacement. 4. Remove the brake rotor. Refer to Rear Brake Rotor Replacement. 5. Remove the wheel speed sensor. Refer to Rear Wheel Speed Sensor Replacement. 6. Remove the wheel drive shaft retaining nut. Refer to Rear Wheel Drive Shaft Replacement.	
1	Rear Wheel Bearing/Hub Bolt (Qty: 4) Caution: Refer to Fastener Caution in the Preface section. Procedure 1. Use the proper cleaner to the thread of the bolts 2. Apply thread locker to the wheel bearing/hub bolts. Refer to Adhesives, Fluids, Lubricants, and Sealers. Tip

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	Allow the threadlocker to set for 10 minutes before using. Tighten 75 N·m (55 lb ft)
2	Wheel Bearing/Hub Tip If removing the wheel bearing/hub assembly to service other components, use caution as not to damage the wheel bearing/hub assembly.

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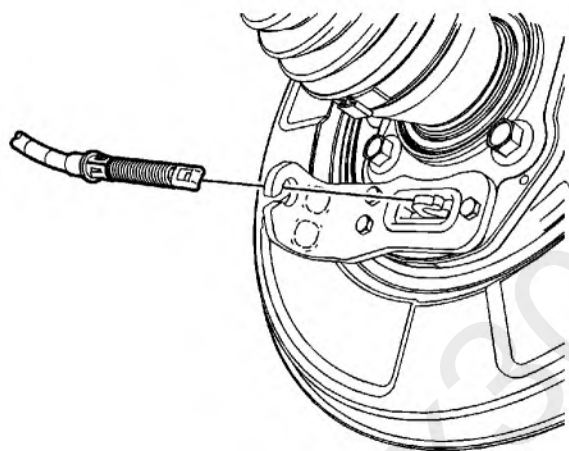
Support Replacement (AWD)

Special Tools

[J 37043](#) Park Brake Cable Release Tool

Removal Procedure

1. Place the park brake lever in the release position.
2. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
3. Remove the tires and wheels. Refer to [Tire and Wheel Removal and Installation](#).
4. Remove the exhaust muffler. Refer to [Exhaust System Replacement](#).



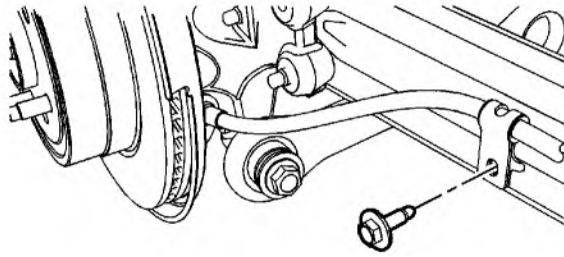
5. Disconnect the rear park brake cables from the park brake actuators.
6. Using the [J 37043](#), remove the park brake cables from the mounting brackets.
7. Position the rear park brake cables aside.
8. Disconnect the rear wheel speed sensor electrical connectors and routing clips from the rear support and upper control arms.

Position the wiring harness aside.

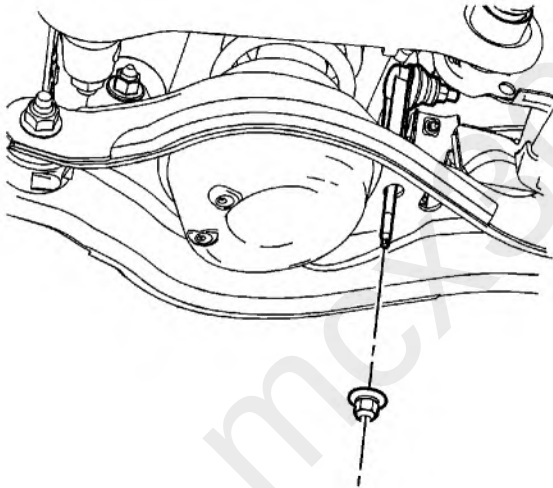
9. Remove the rear brake hose bracket nut and bolt.

Caution: Support the brake caliper with heavy mechanic wire, or equivalent, whenever it is separated from its mount and the hydraulic flexible brake hose is still connected. Failure to support the caliper in this manner will cause the flexible brake hose to bear the weight of the caliper, which may cause damage to the brake hose and in turn may cause a brake fluid leak.

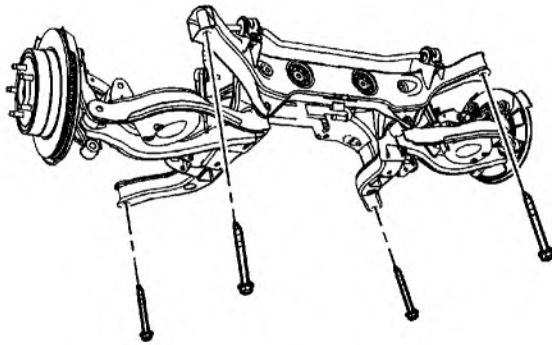
10. Remove the brake calipers and brackets as assemblies and support them with heavy mechanics wire or equivalent. Refer to [Rear Brake Caliper Bracket Replacement](#).



11. Remove the rear park brake cable routing bolts from the trailing arms.



12. While holding the stabilizer link with a wrench, remove the stabilizer link-to-lower control arm nut.
13. Remove the trailing arms. Refer to [Trailing Arm Replacement](#).
14. Remove the adjustment links. Refer to [Adjust Link Replacement](#).
15. Remove the rear wheel drive shafts. Refer to [Rear Wheel Drive Shaft Replacement](#).
16. Remove the rear differential. Refer to [Differential Replacement](#).
17. Position a transmission jack under the rear support and firmly secure the support to the jack with straps.

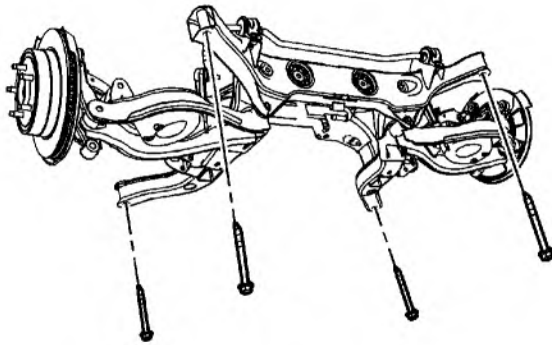


18. Remove the 4 rear support to body bolts.
19. Remove the rear support assembly from the vehicle.
20. With the aid of an assistant, remove the rear support from the transmission jack and place it on the floor.

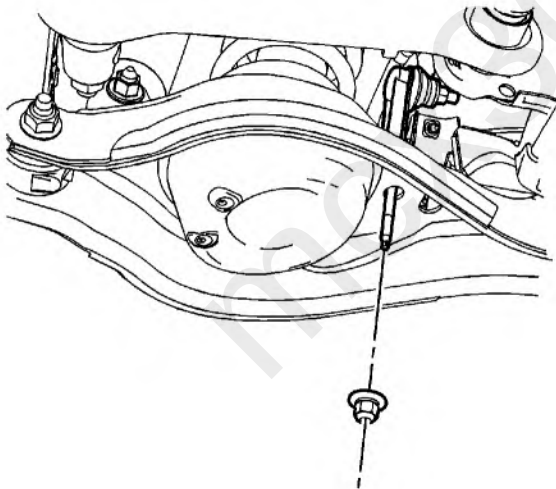
Installation Procedure

Caution: Refer to [Fastener Caution](#) in the Preface section.

1. If a new rear support is being installed, a transfer of components is necessary.
 - Upper Control Arms
 - Tighten the upper control arm to rear support nut and bolt to **160 N·m (118 lb ft)**.
 - Lower Control Arms
 - Tighten the lower control arm to rear support nut and bolt to **110 N·m (81 lb ft)**.
 - Stabilizer bar and insulators
 - Tighten the stabilizer shaft insulator clamp bolts to **70 N·m (52 lb ft)**.
 - Tighten the stabilizer link to stabilizer shaft nut to **57 N·m (42 lb ft)**.
 - Knuckles - Loosely install the upper and lower control arm to knuckle nuts/bolts. These fasteners will be tightened later in this procedure after the wheel driveshafts are installed.
2. With the aid of an assistant, position the rear support onto the transmission jack and firmly secure the support to the jack with straps.
3. Position the rear support assembly to the vehicle.



4. Install the 4 rear support to body bolts and tighten to **170 N·m (125 lb ft)**.
5. Install the rear differential. Refer to [Differential Replacement](#).
6. Install the rear wheel drive shafts. Refer to [Rear Wheel Drive Shaft Replacement](#).
7. Install the adjustment links. Refer to [Adjust Link Replacement](#).
8. Install the trailing arms. Refer to [Trailing Arm Replacement](#).

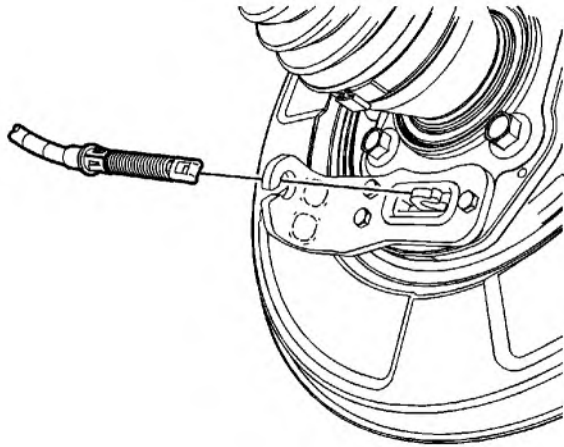


9. While holding the stabilizer link, install the stabilizer link-to-lower control arm nut and tighten to **15 N·m (11 lb ft)**.

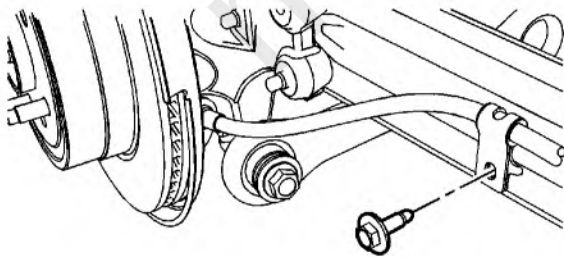
Caution: Support the brake caliper with heavy mechanic wire, or equivalent, whenever it is separated from its mount and the hydraulic flexible brake hose is still connected. Failure to support the caliper in this manner will cause the flexible brake hose to bear the weight of the caliper, which may cause damage to the brake hose and in turn may cause a brake fluid leak.

10. Remove the supporting wire and position the brake caliper and bracket assemblies back onto the knuckles. Refer to [Rear Brake Caliper Bracket Replacement](#).
11. Install the rear brake hose bracket nut and bolt and tighten to **12 N·m (106 lb in)**.
12. Position the wiring harness back to the original location, connect the routing clips to the rear support and upper control arms.

Connect the rear wheel speed sensor electrical connectors.



13. Connect the rear park brake cables through the mounting brackets and onto the park brake actuators.



14. Install the rear park brake cable routing bolts to the trailing arms and tighten the bolts to **12 N·m (106 lb in)**.

15. Install the exhaust muffler. Refer to [Exhaust System Replacement](#).
16. Install the tires and wheels. Refer to [Tire and Wheel Removal and Installation](#).
17. Check the rear alignment. Refer to [Wheel Alignment Measurement](#).

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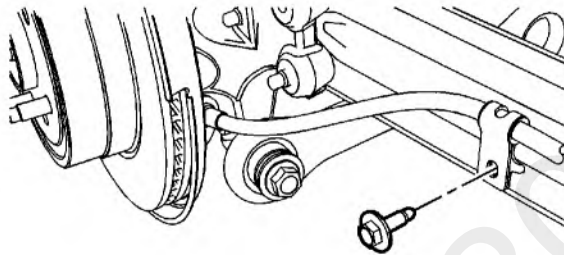
Support Replacement (FWD)

Special Tools

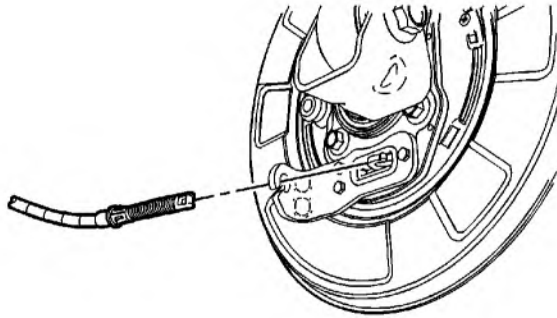
[J 37043](#) Park Brake Cable Release Tool

Removal Procedure

1. Place the park brake lever in the release position.
2. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
3. Remove the tires and wheels. Refer to [Tire and Wheel Removal and Installation](#).
4. Remove the exhaust muffler. Refer to [Exhaust System Replacement](#).



5. Remove the rear park brake cable routing bolts from the trailing arms.



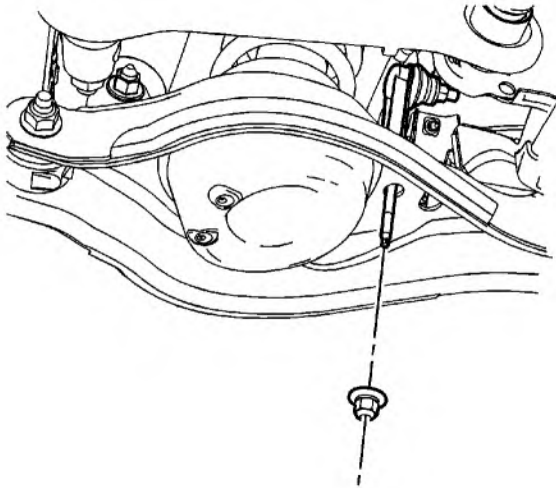
6. Disconnect the rear park brake cables from the park brake actuators.
7. Using the [J 37043](#) , remove the park brake cables from the mounting brackets.
8. Position the rear park brake cables aside.
9. Disconnect the rear wheel speed sensor electrical connectors and the routing clips from the rear support and upper control arms.

Position the wiring harness aside.

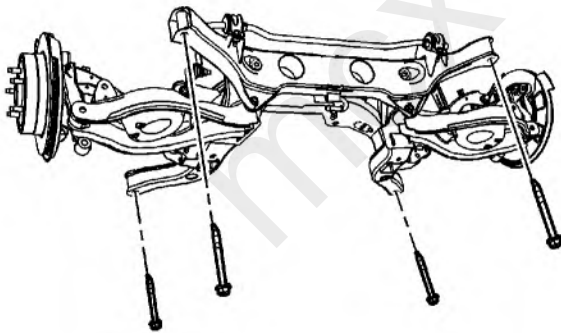
10. Remove the rear brake hose bracket nut and bolt.

Caution: Support the brake caliper with heavy mechanic wire, or equivalent, whenever it is separated from its mount and the hydraulic flexible brake hose is still connected. Failure to support the caliper in this manner will cause the flexible brake hose to bear the weight of the caliper, which may cause damage to the brake hose and in turn may cause a brake fluid leak.

11. Remove the brake calipers and brackets as assemblies and support them with heavy mechanics wire or equivalent. Refer to [Rear Brake Caliper Bracket Replacement](#).



12. While holding the stabilizer link with a wrench, remove the stabilizer link-to-lower control arm nut.
13. Remove the trailing arms. Refer to [Trailing Arm Replacement](#).
14. Remove the adjustment links. Refer to [Adjust Link Replacement](#).
15. Remove the coil springs. Refer to [Coil Spring Replacement](#).
16. Position a transmission jack under the rear support and firmly secure the support to the jack with straps.

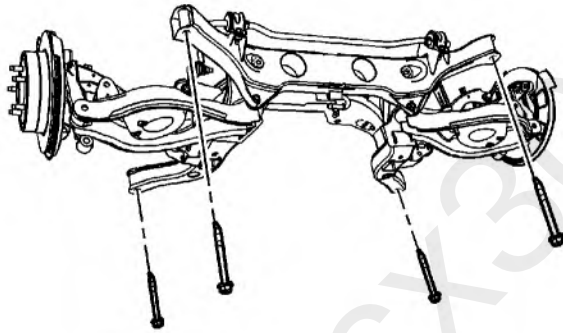


17. Remove the 4 rear support to body bolts.
18. Remove the rear support assembly from the vehicle.
19. With the aid of an assistant, remove the rear support from the transmission jack and place it on the floor.

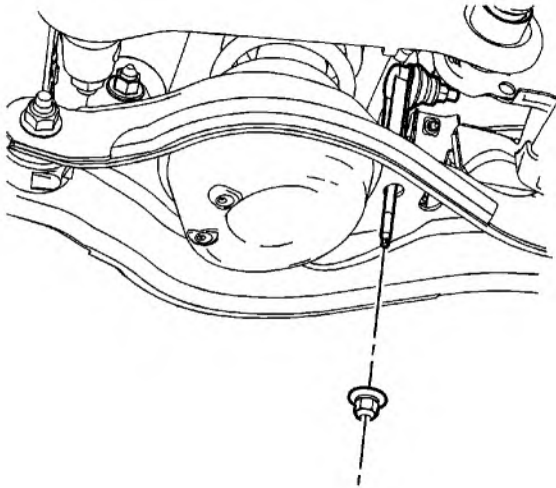
Installation Procedure

Caution: Refer to [Fastener Caution](#) in the Preface section.

1. If a new rear support is being installed, a transfer of components is necessary.
 - Upper Control Arms
 - Tighten the upper control arm to rear support nut and bolt to **160 N·m (118 lb ft)**.
 - Lower Control Arms
 - Tighten the lower control arm to rear support nut and bolt to **110 N·m (81 lb ft)**.
 - Stabilizer bar and insulators
 - Tighten the stabilizer shaft insulator clamp bolts to **70 N·m (52 lb ft)**.
 - Tighten the stabilizer link to stabilizer shaft nut to **57 N·m (42 lb ft)**.
 - Knuckles - The lower control arm to knuckle bolt/nut will be installed and tightened when the coil spring is installed later in this procedure.
 - Tighten upper control arm to knuckle bolt and nut to **160 N·m (118 lb ft)**.
2. With the aid of an assistant, position the rear support onto the transmission jack and firmly secure the support to the jack with straps.
3. Position the rear support assembly to the vehicle.



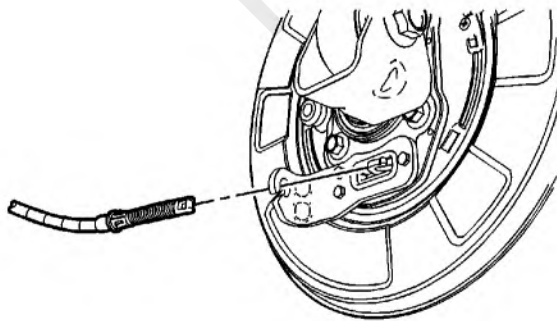
4. Install the 4 rear support to body bolts and tighten to **170 N·m (125 lb ft)**.
5. Install the coil springs. Refer to [Coil Spring Replacement](#).
6. Install the adjustment links. Refer to [Adjust Link Replacement](#).
7. Install the trailing arms. Refer to [Trailing Arm Replacement](#).



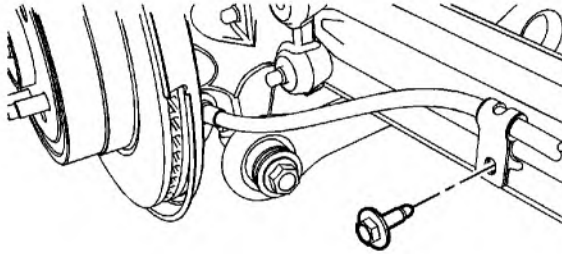
8. While holding the stabilizer link, install the stabilizer link-to-lower control arm nut and tighten to **15 N·m (11 lb ft)**.

Caution: Support the brake caliper with heavy mechanic wire, or equivalent, whenever it is separated from its mount and the hydraulic flexible brake hose is still connected. Failure to support the caliper in this manner will cause the flexible brake hose to bear the weight of the caliper, which may cause damage to the brake hose and in turn may cause a brake fluid leak.

9. Remove the supporting wire and position the brake caliper and bracket assemblies back onto the knuckles. Refer to [Rear Brake Caliper Bracket Replacement](#).
10. Install the rear brake hose bracket nut and bolt and tighten to **12 N·m (106 lb in)**.
11. Position the wiring harness back to the original location, connect the routing clips to the rear support and upper control arms. Connect the rear wheel speed sensor electrical connectors.



12. Connect the rear park brake cables through the mounting brackets and onto the park brake actuators.



13. Install the rear park brake cable routing bolts to the trailing arms and tighten to **12 N·m (106 lb in)**.
14. Install the exhaust muffler. Refer to [Exhaust System Replacement](#).
15. Install the tires and wheels. Refer to [Tire and Wheel Removal and Installation](#).
16. Check the rear alignment. Refer to [Wheel Alignment Measurement](#).

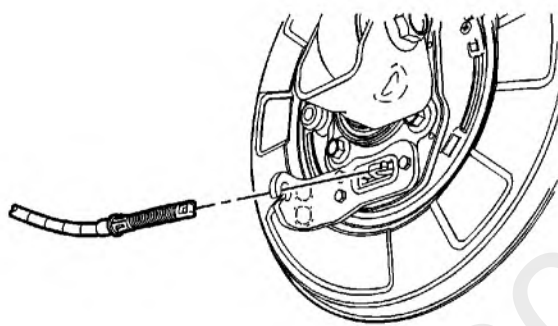
Knuckle Replacement

Special Tools

[J 37043](#) Park Brake Cable Release Tool

Removal Procedure

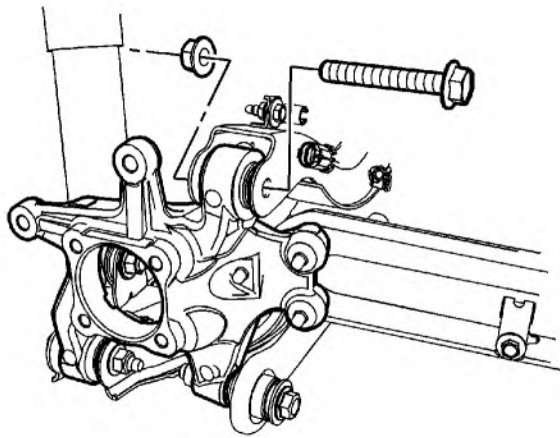
1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#).



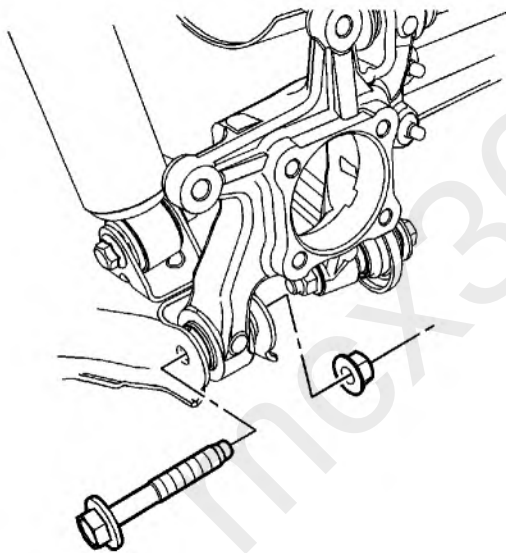
3. Disconnect the rear park brake cable from the park brake actuator.
4. Using the [J 37043](#), remove the park brake cable from the mounting bracket

Caution: Support the brake caliper with heavy mechanic wire, or equivalent, whenever it is separated from its mount and the hydraulic flexible brake hose is still connected. Failure to support the caliper in this manner will cause the flexible brake hose to bear the weight of the caliper, which may cause damage to the brake hose and in turn may cause a brake fluid leak.

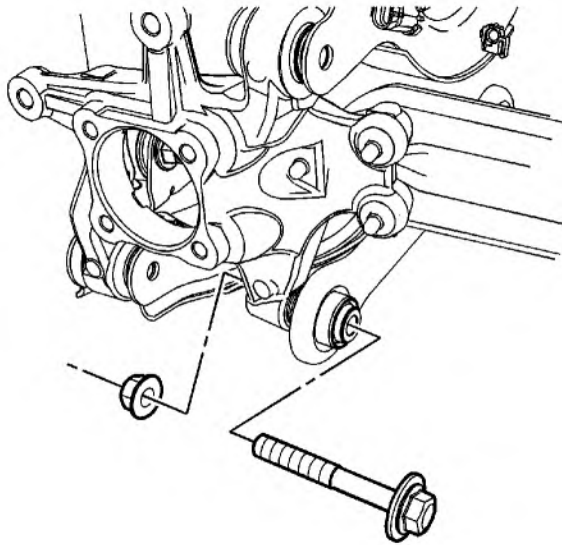
5. Remove the brake caliper and bracket as an assembly and support it with heavy mechanics wire or equivalent. Refer to [Rear Brake Caliper Bracket Replacement](#).
6. Remove the wheel bearing/hub assembly. Refer to [Rear Wheel Bearing and Hub Replacement](#).



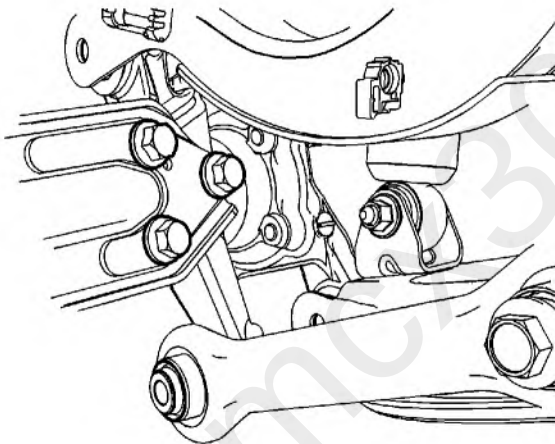
7. Remove the upper control arm to knuckle bolt and nut.



8. Remove the lower control arm to knuckle bolt and nut.

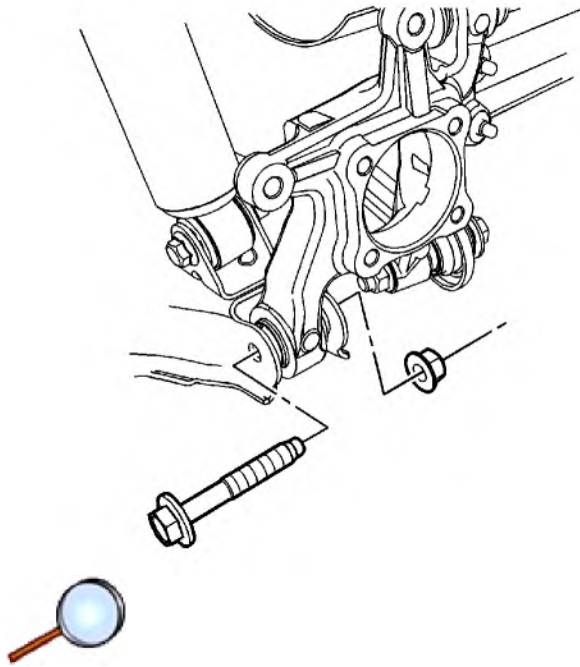


9. Remove the toe link to knuckle bolt and nut.

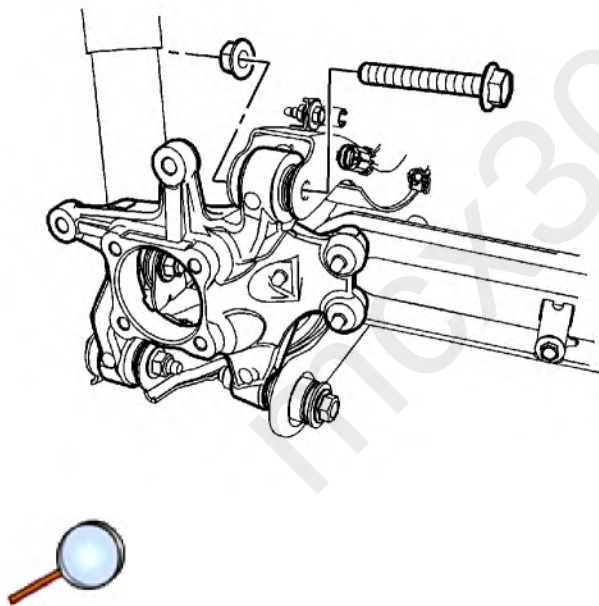


10. Remove the 3 trailing arm to knuckle bolts.
11. Remove the knuckle from the vehicle.

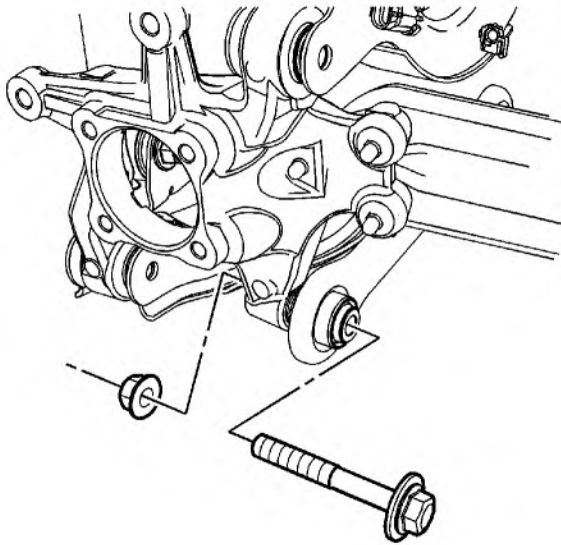
Installation Procedure



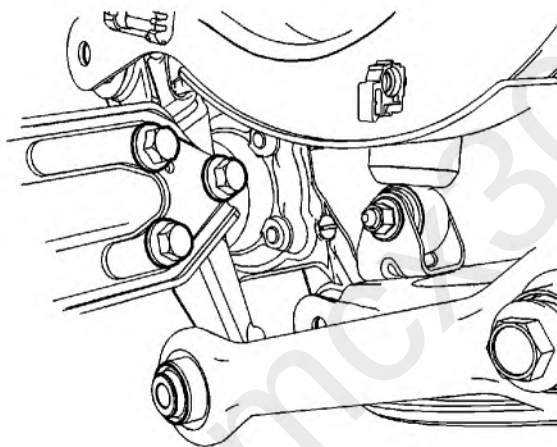
1. Install the knuckle to the lower control arm. Loosely install the bolt and nut.



2. Install the knuckle to the upper control arm. Loosely install the bolt and nut.



3. Install the knuckle to the toe link. Loosely install the bolt and nut.



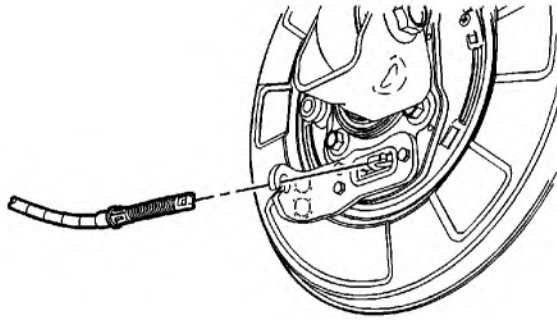
4. Install the 3 trailing arm to knuckle bolts. Loosely install the bolt and nut.

Caution: Refer to [Fastener Caution](#) in the Preface section.

5. Tighten the bolts and nuts in the following sequence:
 - Tighten the knuckle to lower control arm bolt and nut to **160 N·m (118 lb ft)**.
 - Tighten the knuckle to upper control arm bolt and nut to **160 N·m (118 lb ft)**.
 - Tighten the knuckle to toe link bolt and nut to **160 N·m (118 lb ft)**.
 - Tighten the 3 trailing arm to knuckle bolts to **110 N·m (81 lb ft)**.
6. Install the wheel bearing/hub assembly. Refer to [Rear Wheel Bearing and Hub Replacement](#).

Caution: Support the brake caliper with heavy mechanic wire, or equivalent, whenever it is separated from its mount and the hydraulic flexible brake hose is still connected. Failure to support the caliper in this manner will cause the flexible brake hose to bear the weight of the caliper, which may cause damage to the brake hose and in turn may cause a brake fluid leak.

7. Remove the supporting wire and position the brake caliper and bracket assemblies back onto the knuckles. Refer to [Rear Brake Caliper Bracket Replacement](#).

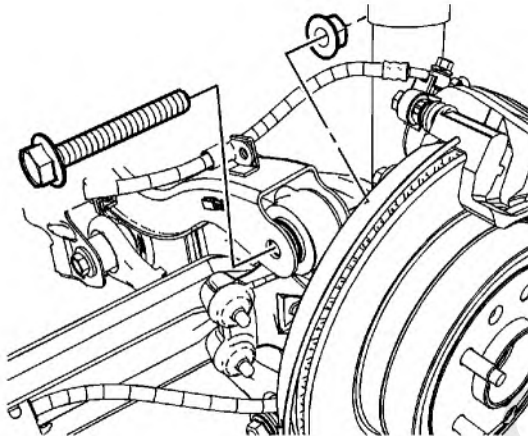


8. Connect the rear park brake cable through the mounting bracket and onto the park brake actuator.
9. Install the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#).
10. Lower the vehicle.
11. Perform a vehicle wheel alignment. Refer to [Wheel Alignment Measurement](#).

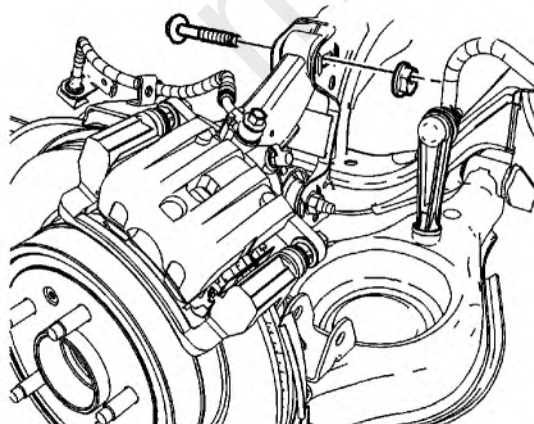
Rear Axle Upper Control Arm Replacement

Removal Procedure

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
3. Disconnect the antilock brake system (ABS) brake wiring harness from the upper control arm.
4. Remove the rear brake hose routing nut and bolt.

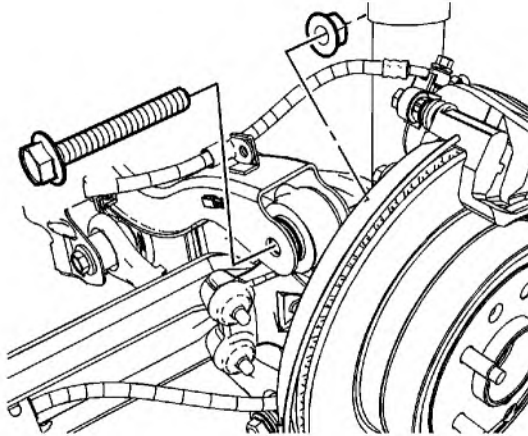


5. Remove the upper control arm to knuckle nut and bolt.

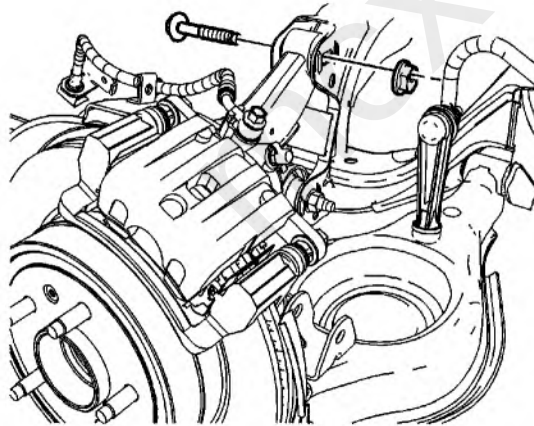


6. Remove the upper control to support cam nut and bolt.
7. Remove the upper control arm.

Installation Procedure



1. Install the upper control arm to the knuckle.
2. Loosely install the upper control arm to knuckle nut and bolt.



3. Install the upper control to support bolt and cam nut.

Caution: Refer to [Fastener Caution](#) in the Preface section.

4. Tighten the upper control arm to knuckle nut and bolt to **160 N·m (118 lb ft)**.

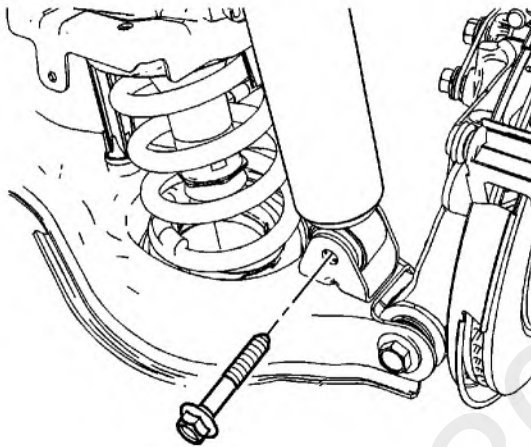
5. Tighten the upper control arm to support bolt to **164 N·m (121 lb ft)**.
6. Install the rear brake hose routing nut and bolt and tighten to **12 N·m (106 lb in)**.
7. Connect the ABS brake wiring harness to the upper control arm.
8. Install the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
9. Lower the vehicle.
10. Check the rear alignment. Refer to [Wheel Alignment Measurement](#).

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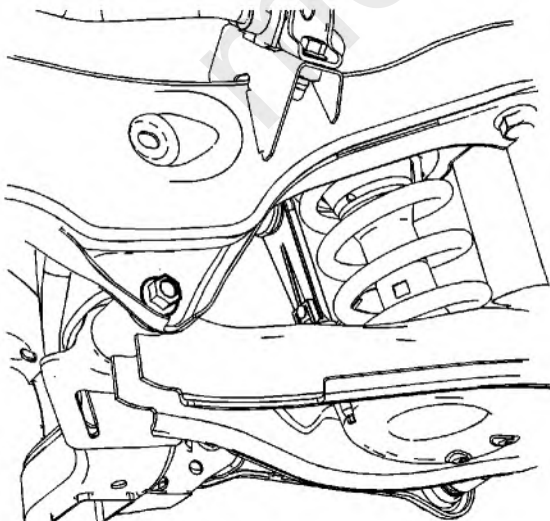
Rear Axle Lower Control Arm Replacement

Removal Procedure

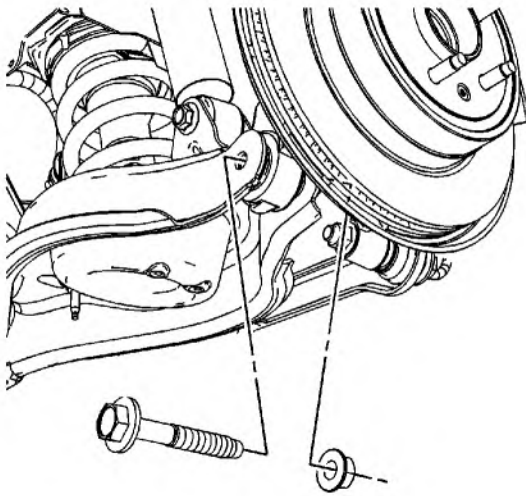
1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
3. Remove the stabilizer shaft link. Refer to [Stabilizer Shaft Link Replacement](#).
4. Position a jackstand underneath the lower control arm.
5. Raise the jackstand slightly to compress the coil spring.



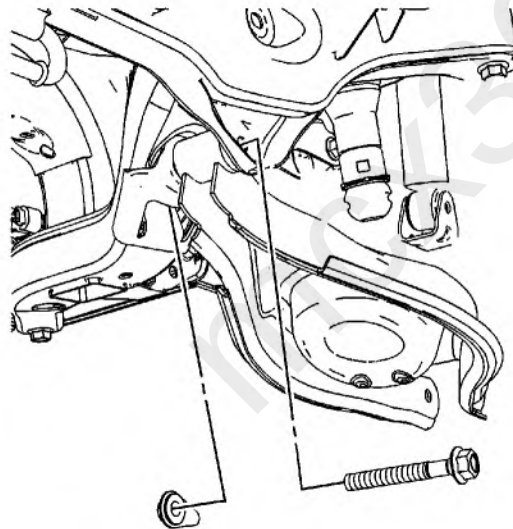
6. Remove the lower shock bolt and nut.



7. Loosen the lower control arm to support frame nut and bolt.



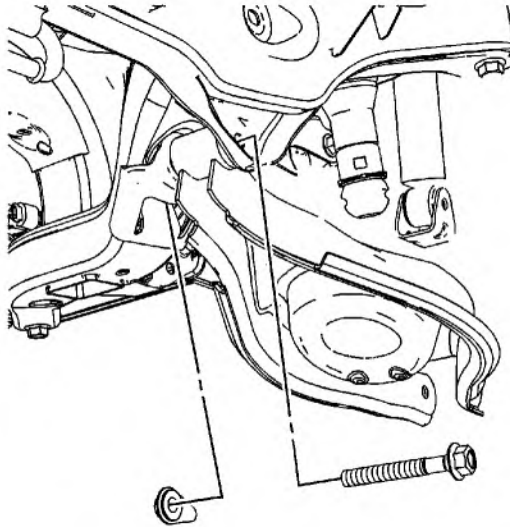
8. Remove the lower control arm to knuckle nut and bolt.
9. Slowly lower the control arm in order to unload the coil spring.
10. Remove the coil spring.
11. Remove the jackstand.



12. Remove the lower control arm to support frame nut and bolt.
13. Remove the lower control arm.

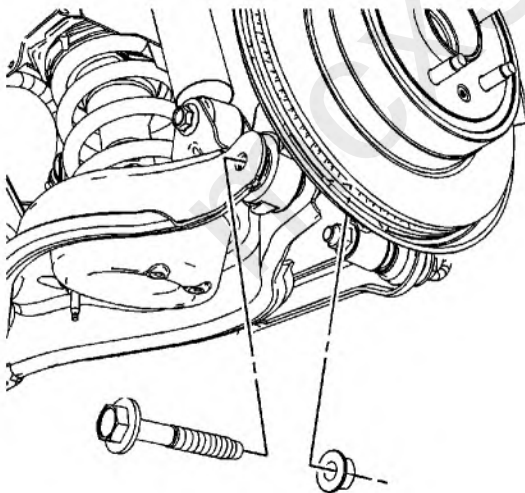
Installation Procedure

1. Inspect the coil spring upper and lower insulators, if damage exists replace the insulators. Refer to [Rear Spring Insulator Replacement](#).

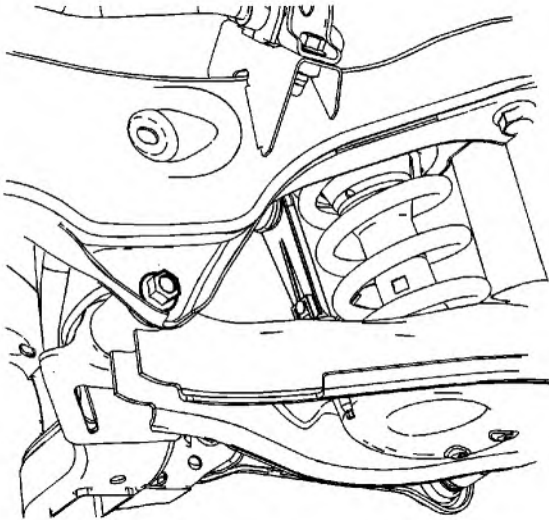


2. Position the lower control arm to the support frame and loosely install the nut and bolt.
3. Position the jackstand under the lower control arm.
4. Position the spring with the rubber insulators into the vehicle.
5. Raise the jackstand to compress the spring.

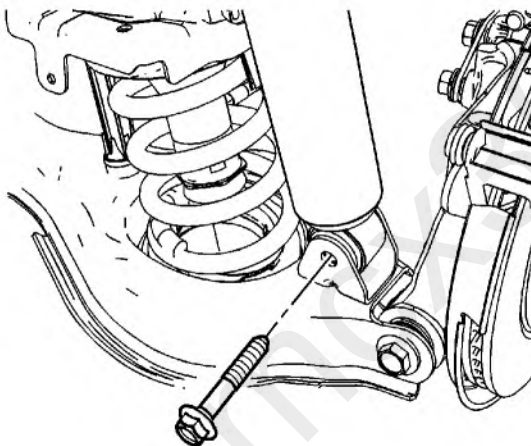
Caution: Refer to [Fastener Caution](#) in the Preface section.



6. Position the lower control arm to the knuckle and install the nut and bolt and tighten to **160 N·m (118 lb ft)**.



7. Tighten the lower control arm to support nut and bolt to **110 N·m (81 lb ft)**.

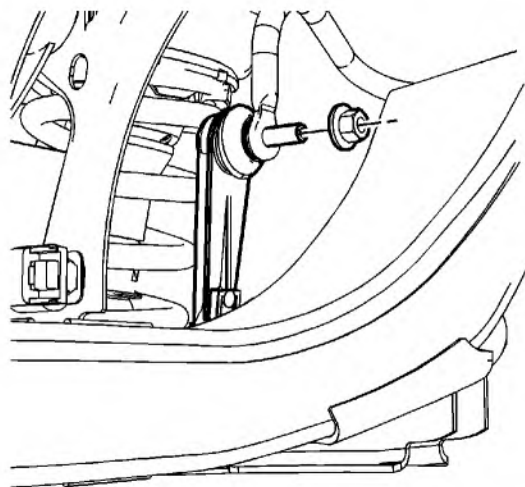


8. Install the shock to the lower control arm nut and bolt and tighten to **110 N·m (81 lb ft)**.
9. Remove the jackstand from under the vehicle.
10. Install the stabilizer shaft link. Refer to [Stabilizer Shaft Link Replacement](#).
11. Install the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
12. Lower the vehicle.
13. Check the rear alignment. Refer to [Wheel Alignment Measurement](#).

Stabilizer Shaft Replacement

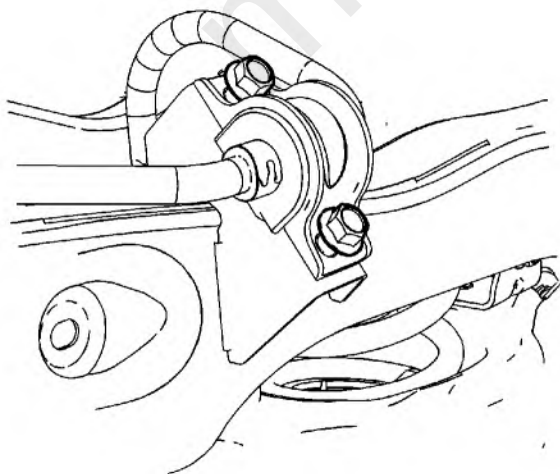
Removal Procedure

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Lower the rear suspension support. Refer to [Support Replacement](#).



Note: Hold the ball shaft secure with a TORX® bit, when removing the nut.

3. Remove the stabilizer link to stabilizer shaft nut.



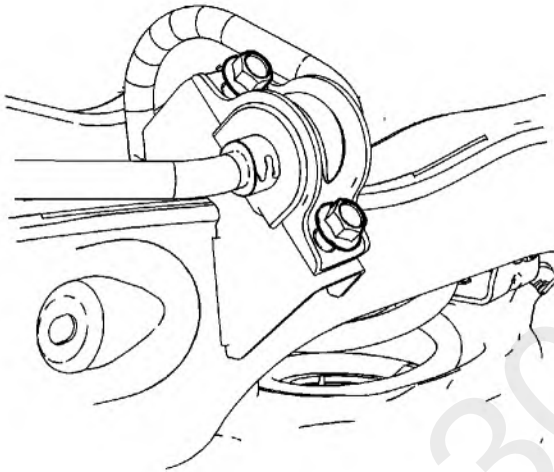
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4. Remove the stabilizer shaft clamp bolts.
5. Remove the stabilizer shaft clamps and bushings from the stabilizer shaft.
6. Disengage the stabilizer shaft from the stabilizer link ball studs, while removing the stabilizer shaft from the vehicle.

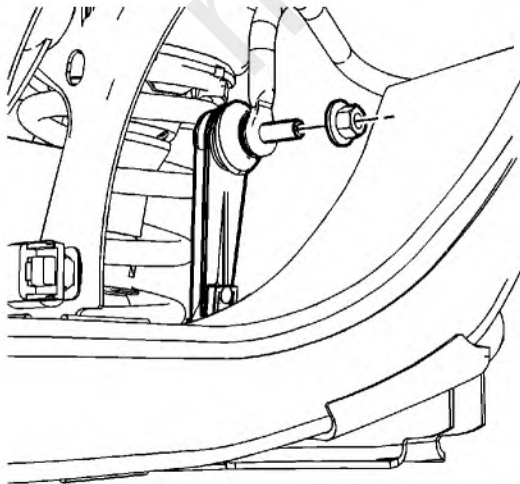
Installation Procedure

1. Position the stabilizer shaft in the vehicle, while positioning the links to the stabilizer bar.
2. Install the stabilizer shaft clamps and bushings to the stabilizer shaft.

Caution: Refer to [Fastener Caution](#) in the Preface section.



3. Install the stabilizer shaft clamp bolts and tighten to **70 N·m (52 lb ft)**.



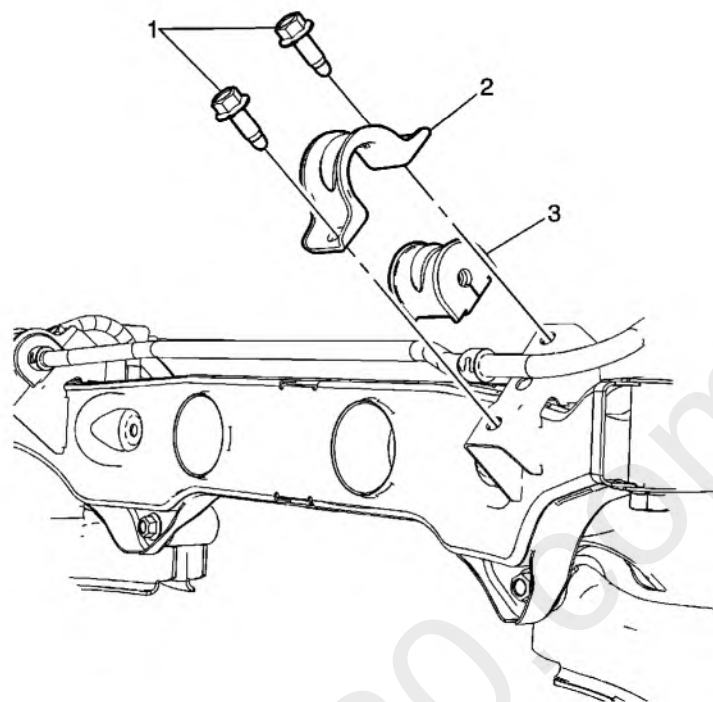


Note: Hold the ball shaft secure with a TORX® bit, when installing the nut.

4. Install the stabilizer link to stabilizer shaft nut and tighten to **50 N·m (37 lb ft)**.
5. Lower the vehicle.

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Stabilizer Shaft Insulator Replacement

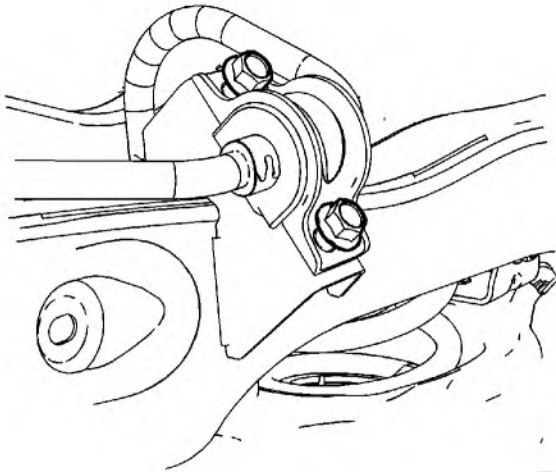


Callout	Component Name
Preliminary Procedure Raise and support the vehicle. Refer to Lifting and Jacking the Vehicle .	
1	Stabilizer Shaft Insulator Bolt (Qty: 4) Caution: Refer to Fastener Caution in the Preface section. Procedure Lower the rear suspension support. Refer to Support Replacement . Tip Lower the rear suspension support enough to remove the stabilizer shaft clamp bolt. Tighten 70 N·m (52 lb ft)
2	Stabilizer Shaft Insulator Clamp (Qty: 2)
3	Stabilizer Shaft Insulator (Qty: 2)

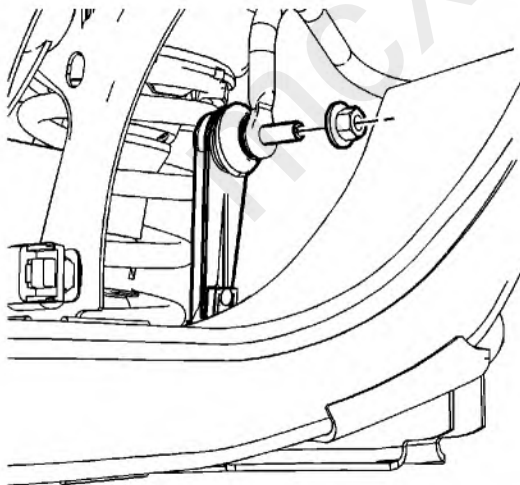
Stabilizer Shaft Link Replacement

Removal Procedure

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



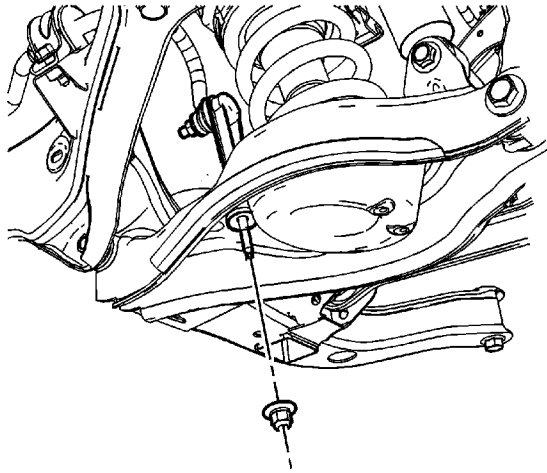
3. Loosen the stabilizer shaft clamp bolts.



Note: Use a 90 degree bend TORX® bit to hold the ball stud when loosening or tightening the nut.

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4. Remove the stabilizer link to stabilizer shaft nut.



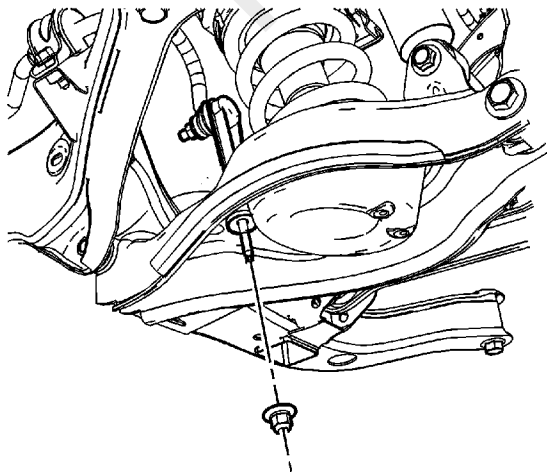
Note: When disconnecting the stabilizer link, hold the link with a wrench to prevent turning.

5. Remove the stabilizer link to lower control arm nut.
6. Remove the stabilizer link from the vehicle.

Installation Procedure

1. Position the stabilizer link through the lower control arm.

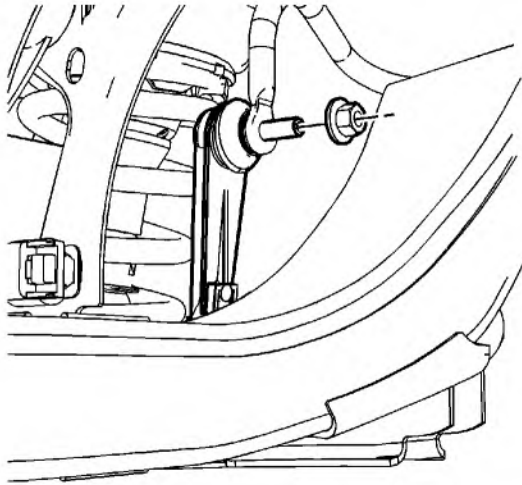
Caution: Refer to [Fastener Caution](#) in the Preface section.





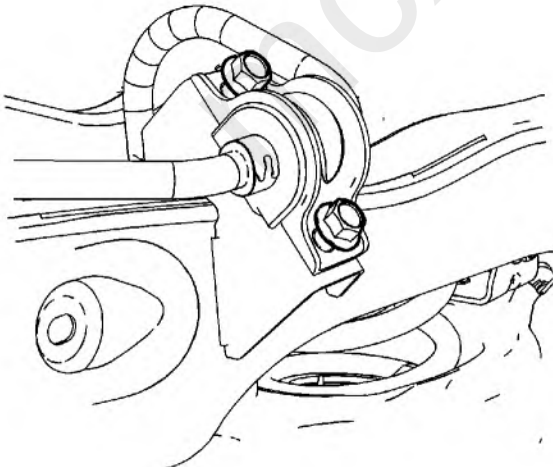
Note: When connecting the stabilizer link, hold the link with a wrench to prevent turning.

2. Install the stabilizer link to lower control arm nut and tighten to **15 N·m (11 lb ft)**.



Note: Use a 90 degree bend TORX® bit to hold the ball stud when tightening the nut.

3. Install the stabilizer link to stabilizer shaft nut and tighten to **50 N·m (37 lb ft)**.



4. Tighten the loose stabilizer shaft clamp bolts to **70 N·m (52 lb ft)**.
5. Install the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).

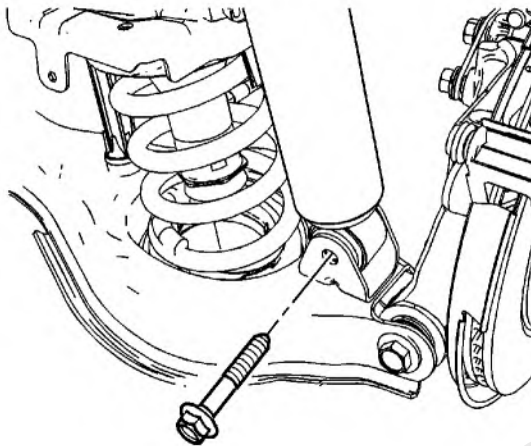
6. Lower the vehicle.

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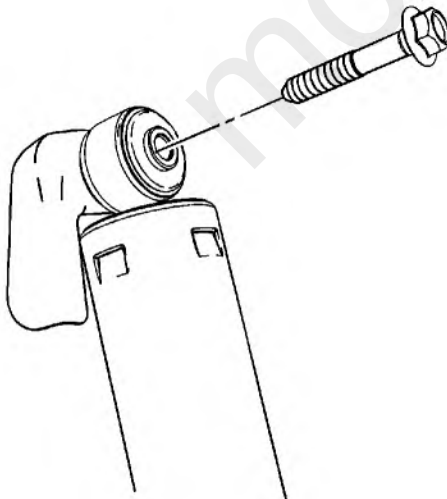
Shock Absorber Replacement

Removal Procedure

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



3. Remove the lower shock bolt and nut.
4. Remove the rear wheel house from the vehicle. Refer to [Rear Wheelhouse Panel Liner Replacement](#).



5. Remove the upper shock bolt.

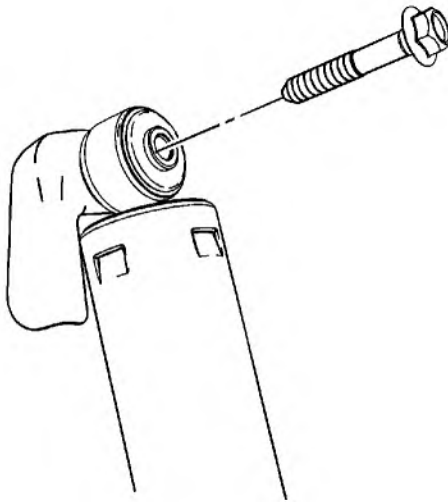
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6. Remove the shock from the vehicle.

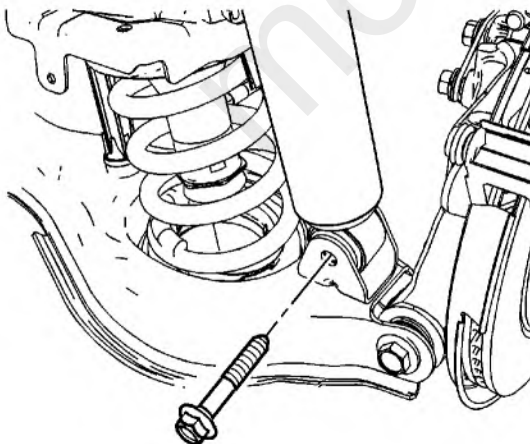
Installation Procedure

1. Position the shock to the vehicle.

Caution: Refer to [Fastener Caution](#) in the Preface section.



2. Install the upper shock bolt and tighten to **110 N·m (81 lb ft)**.



3. Install the lower shock bolt and nut and tighten to **110 N·m (81 lb ft)**.
4. install the rear wheel house in the vehicle. Refer to [Rear Wheelhouse Panel Liner Replacement](#).

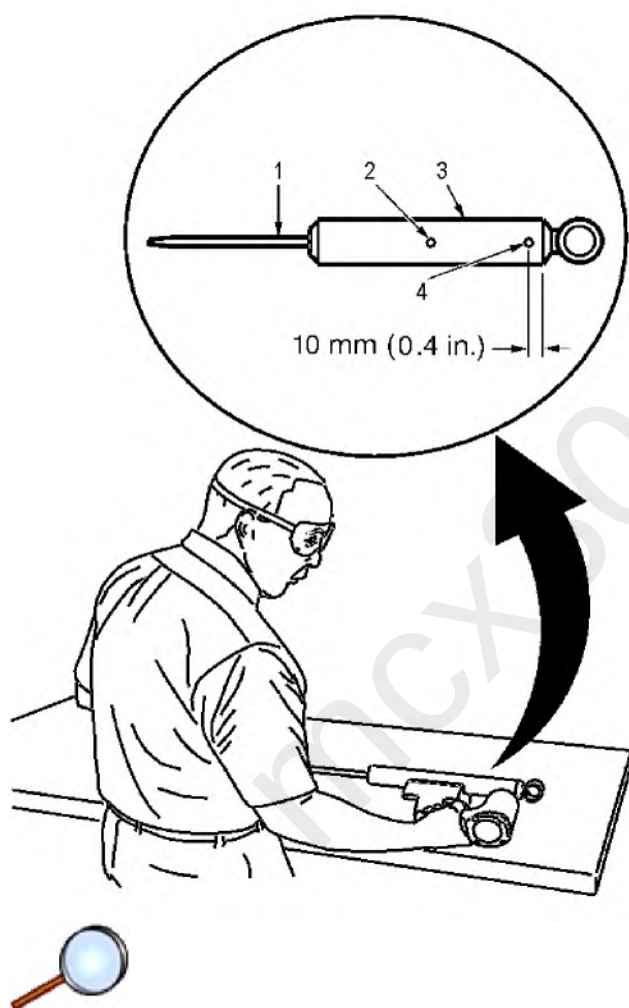
5. Install the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
6. Lower the vehicle.

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Shock Absorber Disposal

Warning: 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.

Warning: 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.



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.

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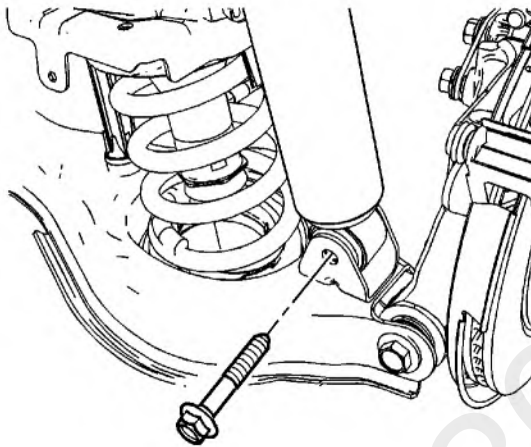
6. Remove the shock absorber from the vise. Hold the shock absorber over a drain pan horizontally with the holes down. Move the rod (1) in and out of the tube (3) to completely drain the oil from the shock absorber.

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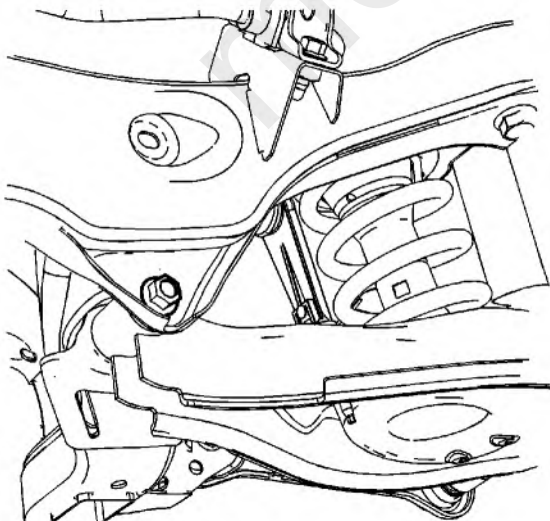
Coil Spring Replacement

Removal Procedure

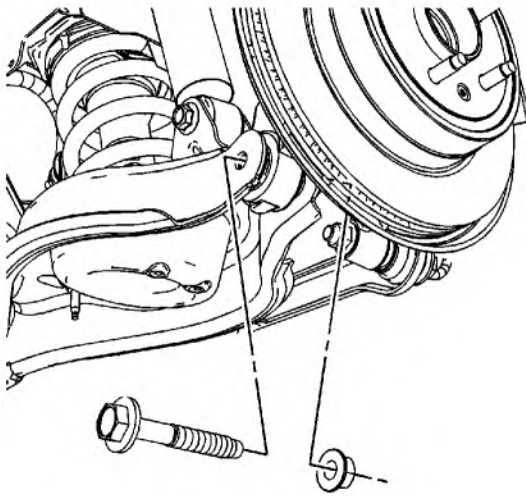
1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
3. Remove the stabilizer shaft link. Refer to [Stabilizer Shaft Link Replacement](#).
4. Position a jackstand underneath the lower control arm.
5. Raise the jackstand slightly to compress the coil spring.



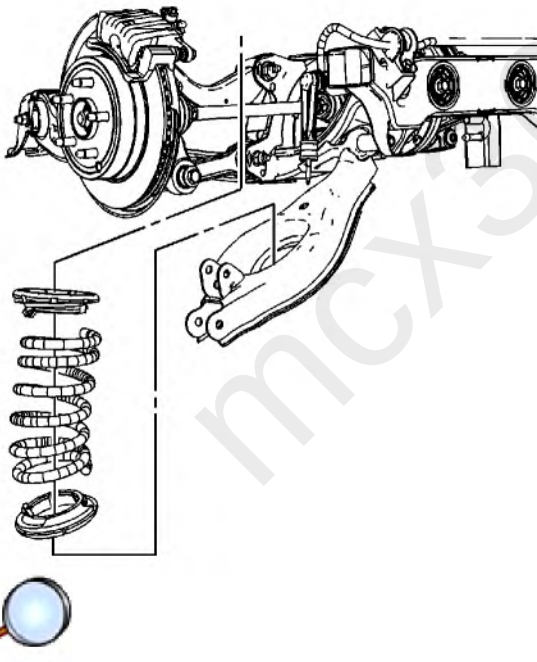
6. Remove the lower shock bolt and nut.



7. Loosen the lower control arm to support frame nut and bolt.

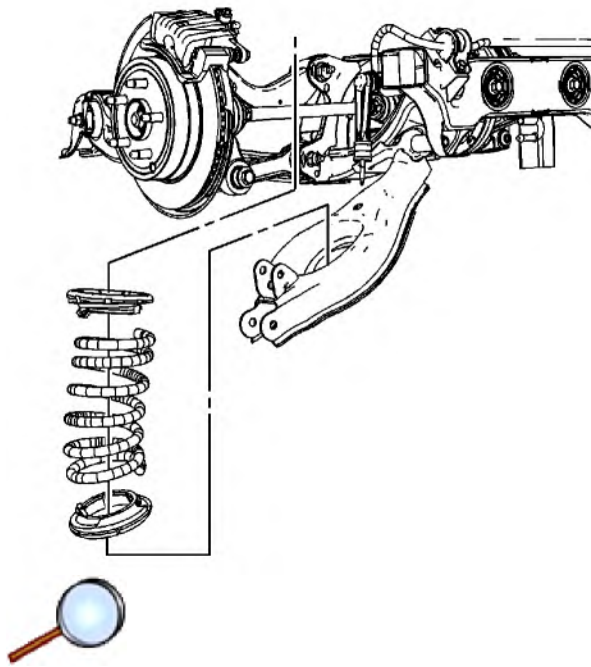


8. Remove the lower control arm to knuckle nut and bolt.
9. Slowly lower the control arm in order to unload the coil spring.



10. Remove the coil spring and insulators.

Installation Procedure

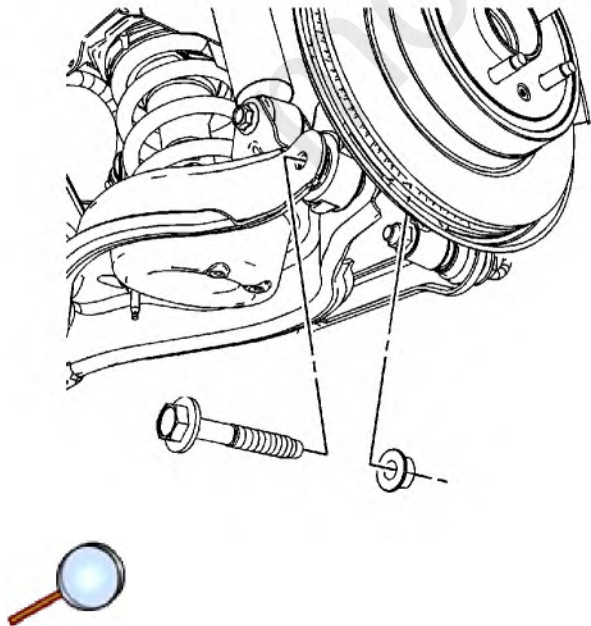


1. Inspect the coil spring upper and lower insulators, if damage exists replace the insulators.

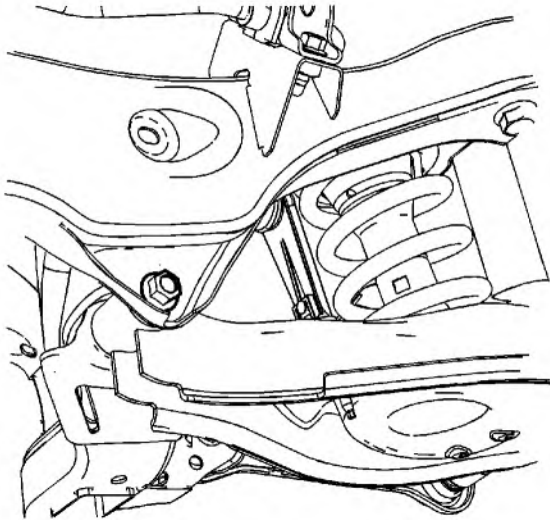
If no damage exists, transfer the existing components. Refer to [Rear Spring Insulator Replacement](#).

2. Position the spring with the rubber insulators into the vehicle.
3. Raise the jackstand to compress the spring.

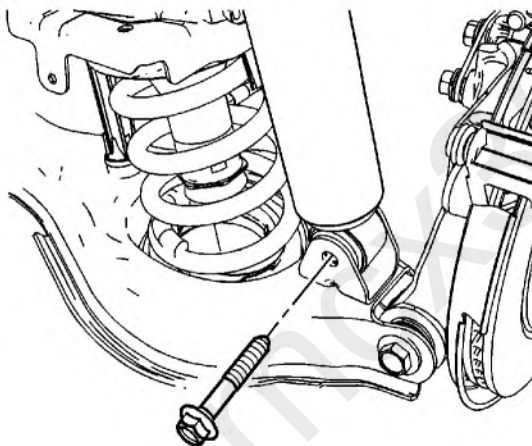
Caution: Refer to [Fastener Caution](#) in the Preface section.



4. Position the lower control arm to the knuckle and install the nut and bolt and tighten the bolt/nut to **160 N·m (118 lb ft)**.



5. Tighten the lower control arm to support nut and bolt to **110 N·m (81 lb ft)**.

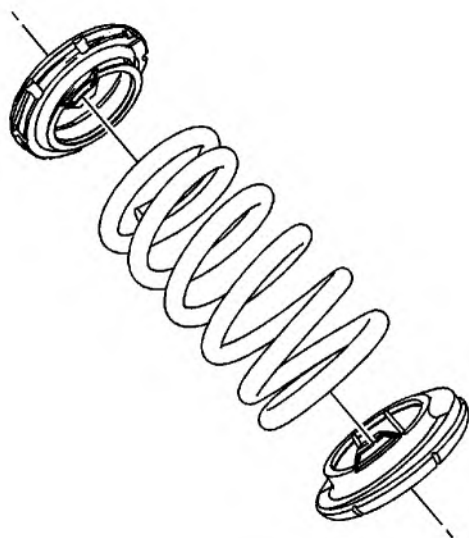


6. Install the shock to the lower control arm nut and bolt and tighten to **110 N·m (81 lb ft)**.
7. Remove the jackstand from under the vehicle.
8. Install the stabilizer shaft link. Refer to [Stabilizer Shaft Link Replacement](#).
9. Install the rear tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
10. Lower the vehicle.

Rear Spring Insulator Replacement

Removal Procedure

1. Remove the coil spring. Refer to [Coil Spring Replacement](#) .

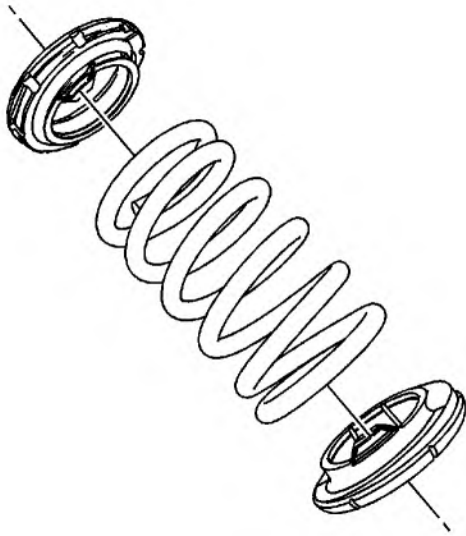


2. Remove the upper and lower rubber insulators from the coil spring.

Installation Procedure

Important:

- Spray silicon lubricant on the insulators to aid in installation.
- Make sure that part number identification tape located on the coil spring is oriented outboard of the vehicle and at the top of the spring.
- Make sure to fully seat the top and bottom coil spring insulators to the spring.

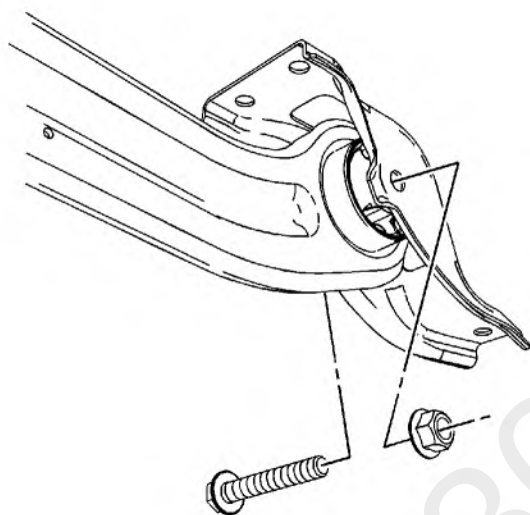


1. Install the upper and lower rubber insulators to the coil spring.
2. Install the coil spring. Refer to [Coil Spring Replacement](#).

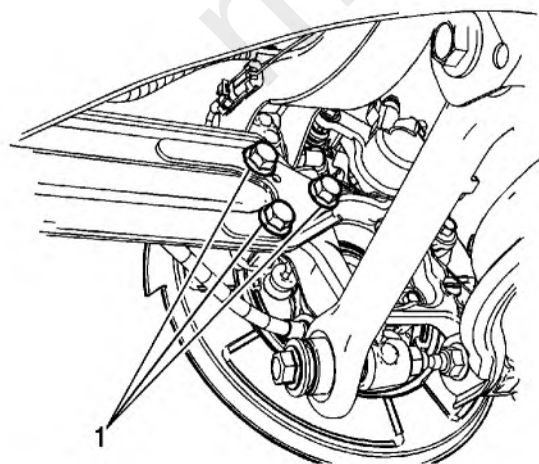
Trailing Arm Replacement

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 park brake cable bolt from the trailing arm and from the frame. Refer to [Parking Brake Rear Cable Replacement](#).
4. Remove the trailing arm bracket to body bolts. Refer to [Trailing Arm Bracket Replacement](#).



5. Remove the trailing arm bushing to bracket nut and bolt.

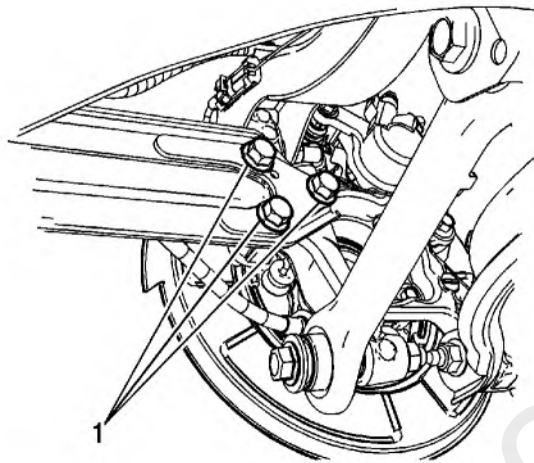


6. Remove the trailing arm to knuckle bolts (1).
7. Remove the trailing arm.

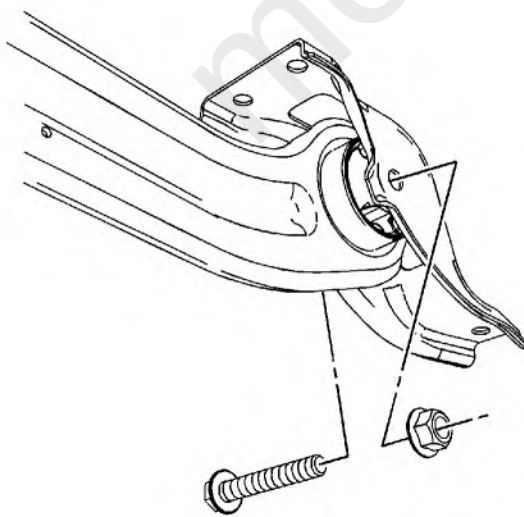
Installation Procedure

1. Position the trailing arm to the vehicle.

Caution: Refer to [Fastener Caution](#) in the Preface section.



2. Install the trailing arm to knuckle bolts (1) and tighten to **110 N·m (81 lb ft)**.
3. Position the trailing arm bracket to the trailing arm.



4. Loosely install the trailing arm bushing to bracket nut and bolt.

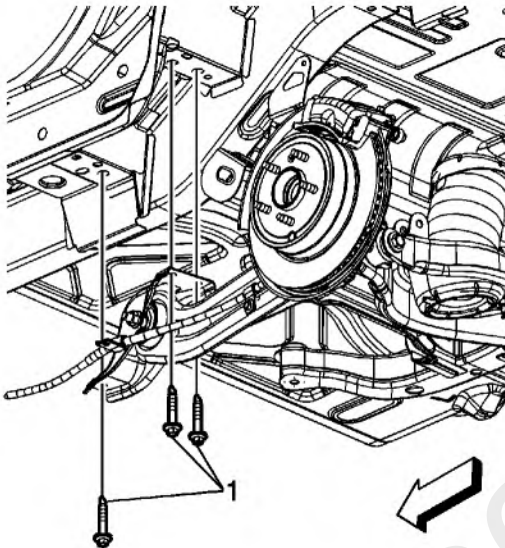
5. Install the trail arm bracket. Refer to [Trailing Arm Bracket Replacement](#).
6. Tighten the trailing arm bushing to bracket nut and bolt to **160 N·m (118 lb ft)**.
7. Install the park brake cable bolt to trailing arm and to the frame. Refer to [Parking Brake Rear Cable Replacement](#).
8. Install the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#).
9. Lower the vehicle.

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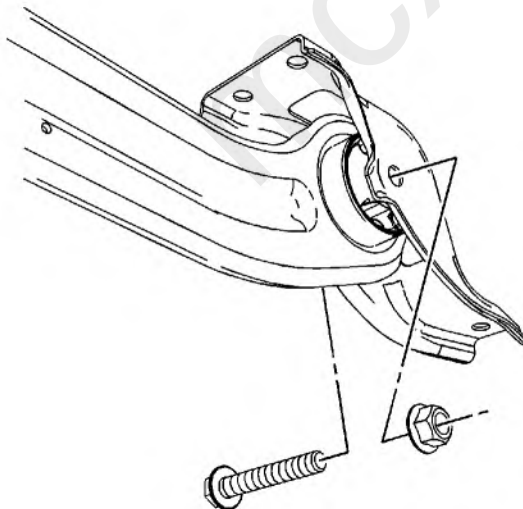
Trailing Arm Bracket Replacement

Removal Procedure

1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the park brake cable from the trailing arm and from the frame. Refer to [Parking Brake Rear Cable Replacement](#).



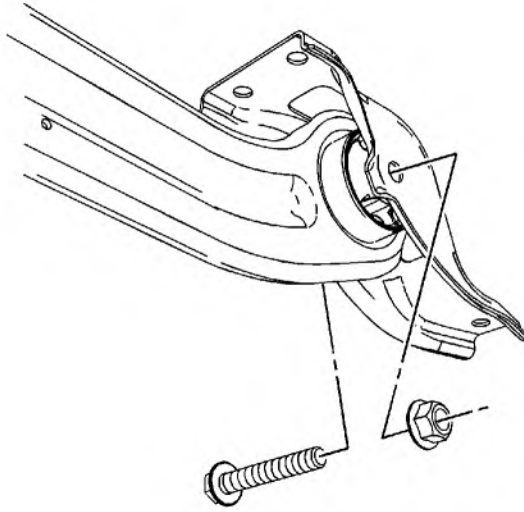
3. Remove the trailing arm bracket to body bolts (1).



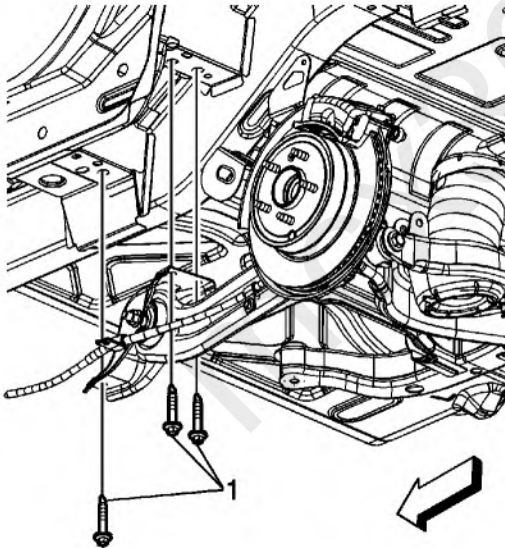
4. Remove the trailing arm bushing to bracket nut and bolt.
 5. Remove the trailing arm bracket.
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Installation Procedure

1. Position the trailing arm bracket to the trailing arm.



2. Loosely install the trailing arm bushing to bracket nut and bolt.



3. Push upward on the trailing arm bracket and loosely install the front bolt (1).

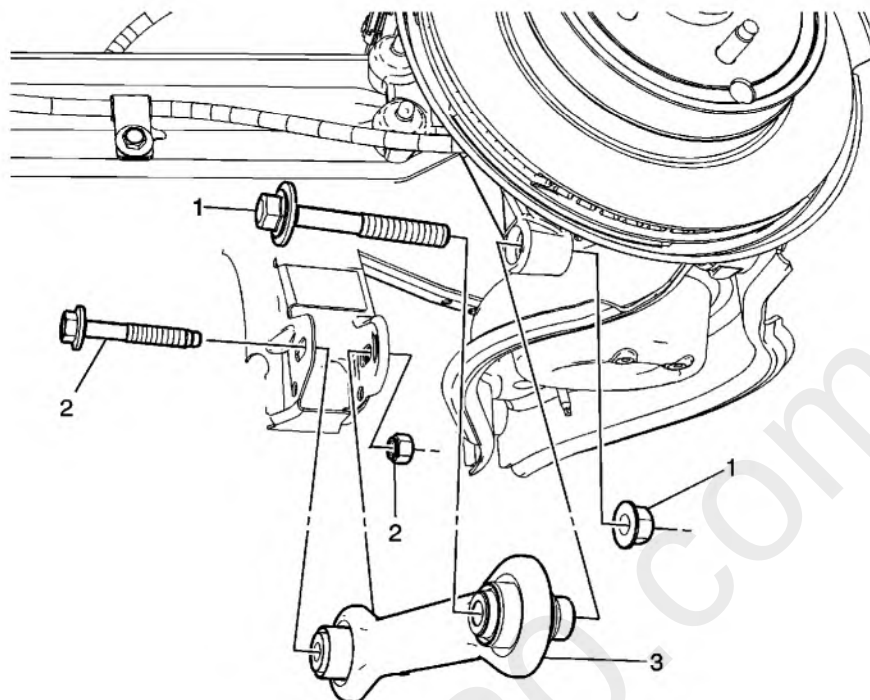
Caution: Refer to [Fastener Caution](#) in the Preface section.

4. Use a drift to align the remaining trailing arm bracket bolts (1). Tighten the bolts to **110 N·m (81 lb ft)**.
5. Tighten the trailing arm bushing to bracket nut and bolt to **160 N·m (118 lb ft)**.
6. Install the park brake cable on the trailing arm and on the frame. Refer to [Parking Brake Rear Cable Replacement](#).

7. Remove the support and lower the vehicle.

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Adjust Link Replacement



Callout	Component Name
Preliminary Procedures	
1. Raise the vehicle. Refer to Lifting and Jacking the Vehicle. 2. Remove the rear wheel and tire assembly. Refer to Tire and Wheel Removal and Installation.	
1	Adjustment Link to Knuckle Bolt and Nut Caution: Refer to Fastener Caution in the Preface section. Tighten 160 N·m (118 lb ft).
2	Adjustment Link to Support Bolt and Nut Torque 160 N·m (118 lb ft).
3	Adjustment Link Procedure

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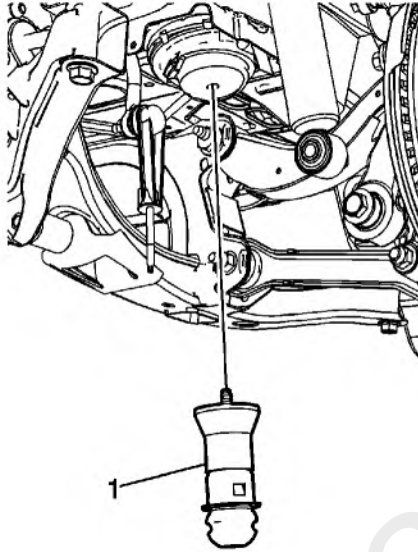
Check rear alignment. Refer to [Wheel Alignment Measurement](#).

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Spring Jounce Bumper Replacement

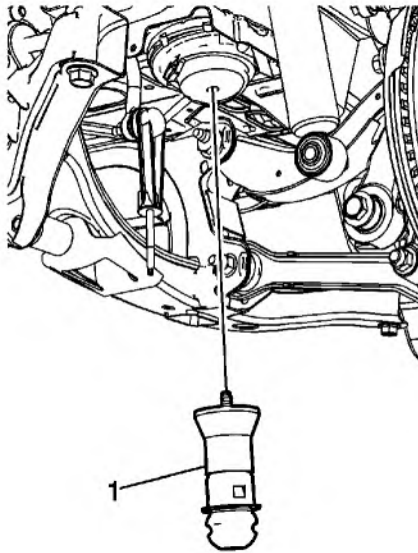
Removal Procedure

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 assembly. Refer to [Rear Axle Lower Control Arm Replacement](#).

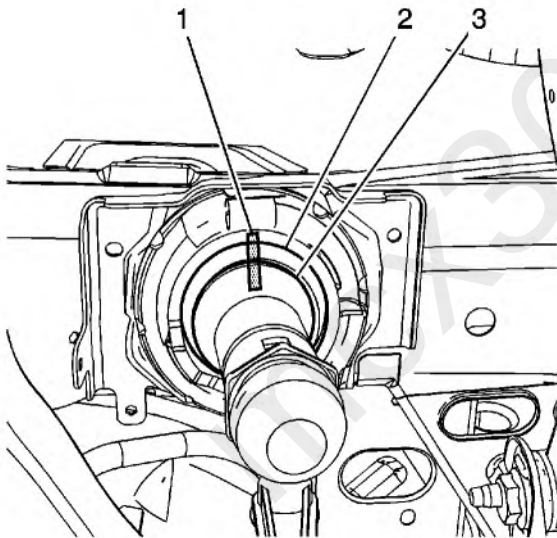


4. Remove the rear suspension jounce bumper (1).

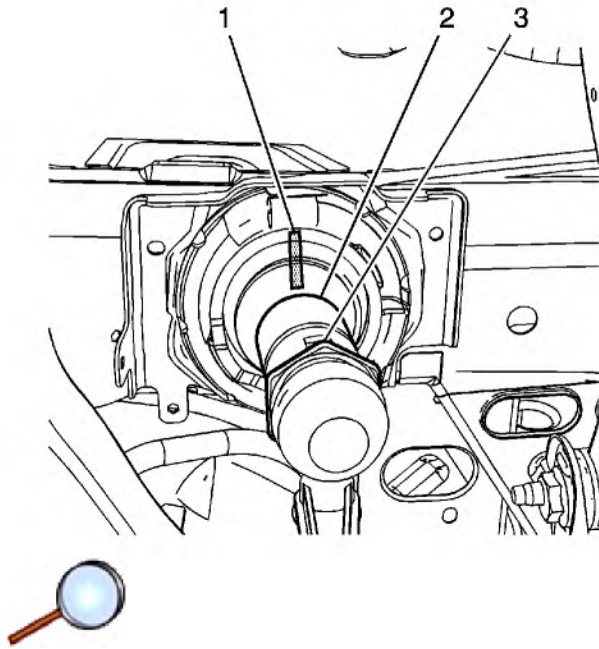
Installation Procedure



1. Install the rear suspension jounce bumper (1) and tighten until the jounce bumper just makes contact with the mounting bracket.



2. Using a grease pencil or equivalent, create a reference mark (1) from the jounce bumper (3) to the mounting bracket (2).
3. Tighten the jounce bumper (3) by rotating it 360° or one full turn.



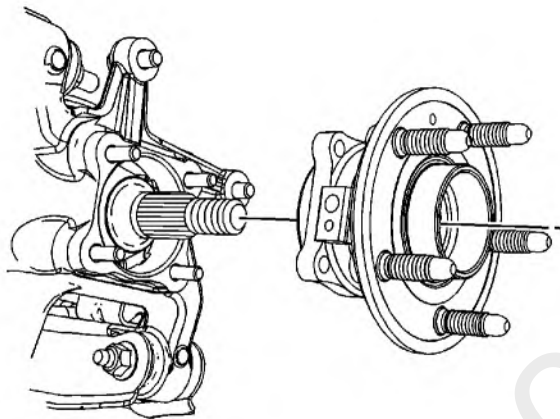
4. Using the reference mark (1) as a starting point, rotate the jounce bumper (2) an additional 120° or two points of the hex nut (3) on the jounce bumper.
5. Install the lower control arm assembly. Refer to [Rear Axle Lower Control Arm Replacement](#).
6. Install the tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#).
7. Remove the support and lower the vehicle.

Wheel Stud Replacement

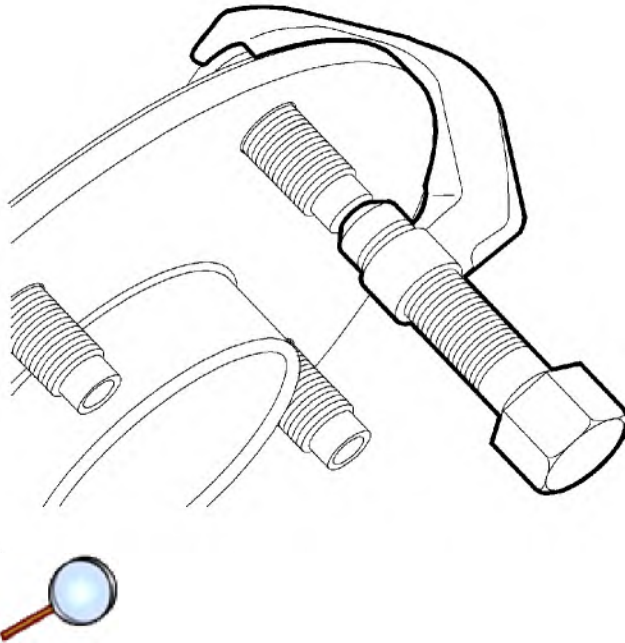
Tools Required

[J 43631](#) Ball Joint Remover

Removal Procedure

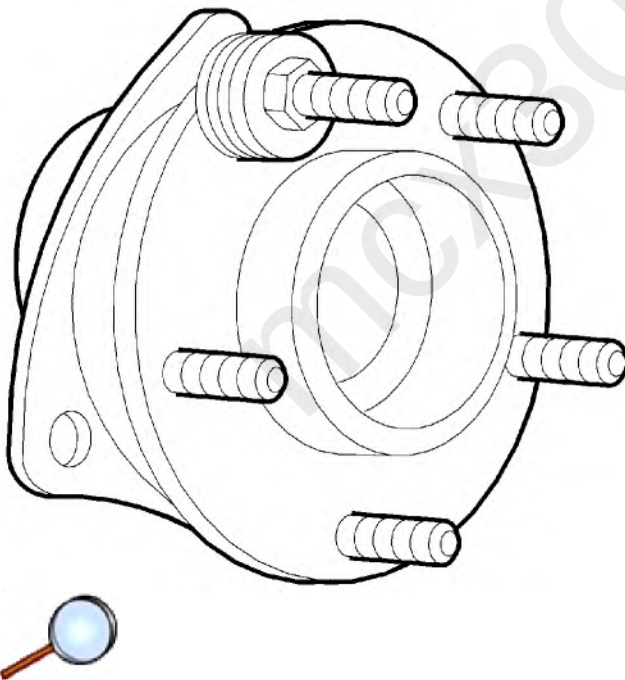


1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#) .
2. Remove the tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#) .
3. Remove the wheel bearing/hub replacement. Refer to [Rear Wheel Bearing and Hub Replacement](#) .



4. Using the [J 43631](#) , press out the wheel stud from the wheel bearing/hub assembly.

Installation Procedure



1. Install the wheel stud to the wheel bearing/hub assembly from the bearing side of the hub flange.
2. Place flat washers over the wheel stud being installed.
3. Install the wheel nut or a hex head nut to the wheel stud.
4. Gradually tighten the nut in order to draw the stud into the hub flange until the head of the wheel stud is fully seated against the hub flange.
5. Remove the nut and flat washers.
6. Install the tire and wheel assembly. Refer to [Tire and Wheel Removal and Installation](#) .

7. Lower the vehicle.

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