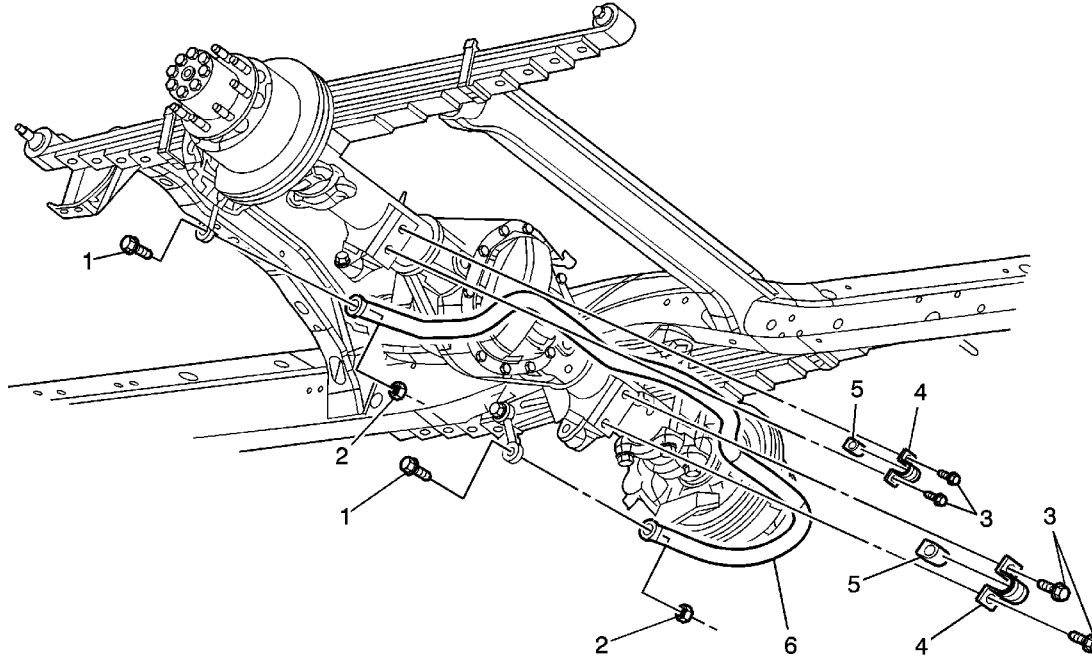


## Fastener Tightening Specifications

Application	Specification	
	Metric	English
Leaf Spring to Front Hanger Mounting Nut	100 N·m + additional 210°	74 lb ft + additional 210°
Leaf Spring to Front Hanger Mounting Nut W/14200 GVW	200N·m + additional 180°	148 lb ft+ additional 180°
Leaf Spring U-Bolts Retaining Nuts (All 1500 Series)	85 N·m	63 lb ft
Leaf Spring U-Bolts Retaining Nuts (All 2500 Series and 3500 Series)	140 N·m + 180°	103 lb ft + 180°
Shock Absorber Mounting Bolts - Lower	135 N·m	100 lb ft
Shock Absorber Mounting Bolts - Upper	25 N·m	18 lb ft
Spring Shackle to Frame Mounting Nut	115 N·m	85 lb ft
Spring Shackle to Leaf Spring Mounting Nut	85 N·m	63 lb ft
Stabilizer Shaft Insulator Clamp Bolts	50 N·m	37 lb ft
Stabilizer Shaft Link Bolts	70 N·m	52 lb ft
Stabilizer Shaft Link Nuts	65 N·m	48 lb ft

## Stabilizer Shaft Replacement

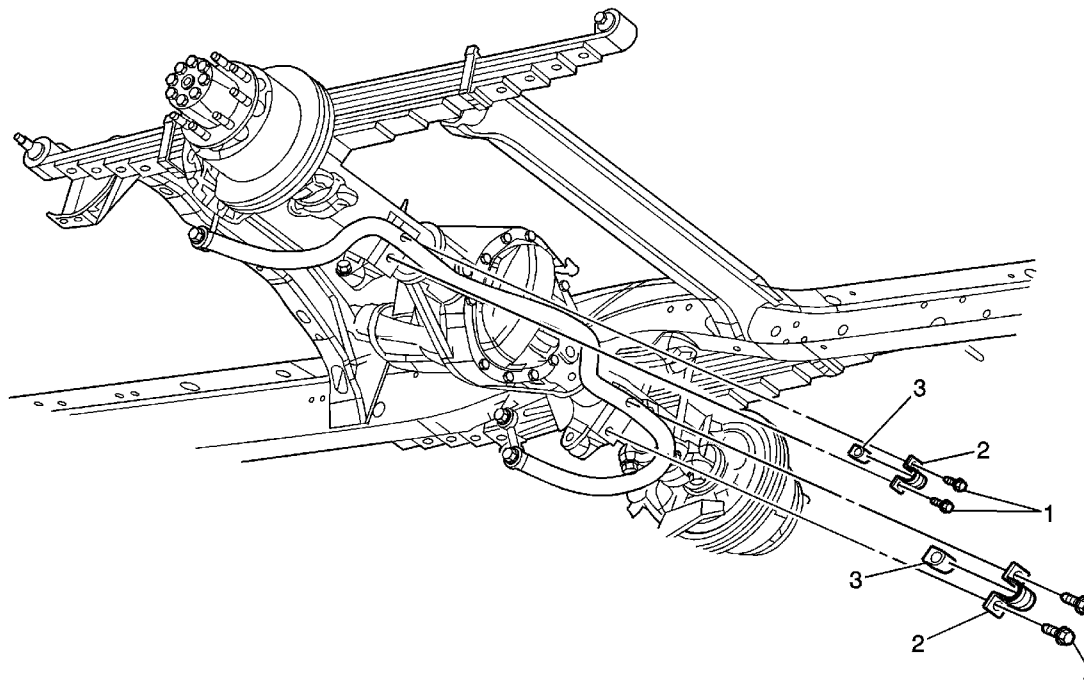


Callout	Component Name
<b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.	
<i>Fastener Tightening Specifications:</i> Refer to <a href="#">Fastener Tightening Specifications</a> .	
<b>Preliminary Procedure</b>	
Raise and support the vehicle. Refer to <a href="#">Lifting and Jacking the Vehicle</a> .	
1	Stabilizer Link Bolt (Qty: 2) <b>Tighten</b> 70 N·m (52 lb ft)
2	Stabilizer Link Nut (Qty: 2) <b>Tip</b> This nut torques with the bolt in step one.
3	Stabilizer Shaft Insulator Clamp Bolt (Qty: 4) <b>Tighten</b> 50 N·m (37 lb ft)

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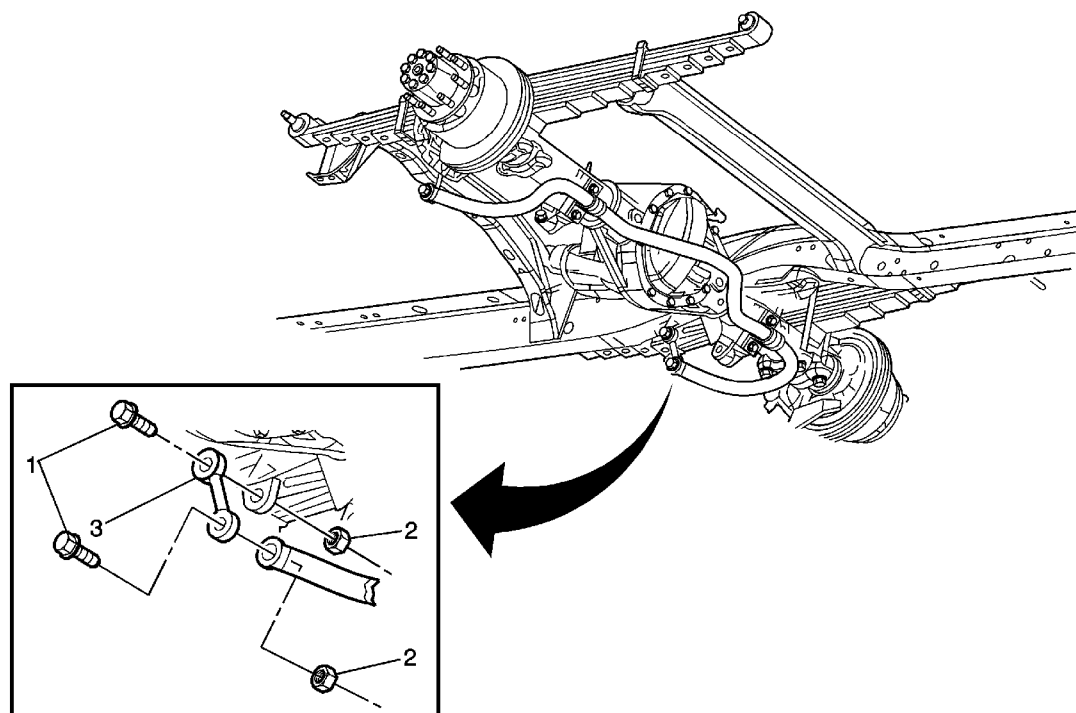
4	Stabilizer Shaft Insulator Clamp (Qty: 2)
5	Stabilizer Shaft Insulator (Qty: 2)
6	Stabilizer Shaft

## Stabilizer Shaft Insulator Replacement



Callout	Component Name
<b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.	
<i>Fastener Tightening Specifications:</i> Refer to <a href="#">Fastener Tightening Specifications</a> .	
<b>Preliminary Procedure</b>	
Raise and support the vehicle. Refer to <a href="#">Lifting and Jacking the Vehicle</a> .	
1	Stabilizer Shaft Bolt (Qty: 4) <b>Tighten</b> 50 N·m (37 lb ft)
2	Stabilizer Shaft Clamp (Qty: 2)
3	Stabilizer Shaft Insulator (Qty: 2)

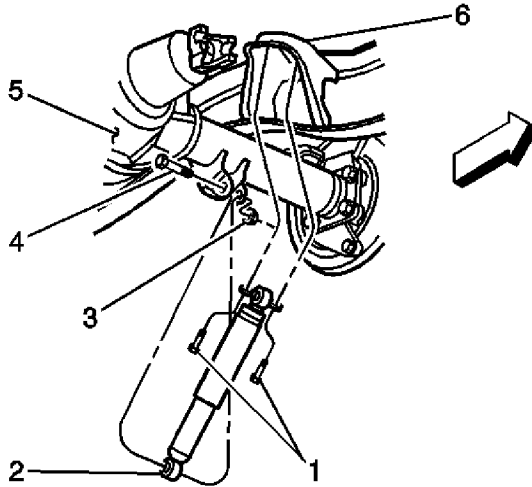
## Stabilizer Shaft Link Replacement



Callout	Component Name
<b>Caution:</b> Refer to <a href="#">Fastener Caution</a> in the Preface section.	
<i>Fastener Tightening Specifications:</i> Refer to <a href="#">Fastener Tightening Specifications</a> .	
<b>Preliminary Procedure</b>	
Raise and support the vehicle. Refer to <a href="#">Lifting and Jacking the Vehicle</a> .	
1	Stabilizer Link Bolt (Qty: 2) <b>Tighten</b> 70 N·m (52 lb ft)
2	Stabilizer Link Nut (Qty: 2) <b>Tip</b> This nut torques with the bolt in step one.
3	Stabilizer Shaft Link

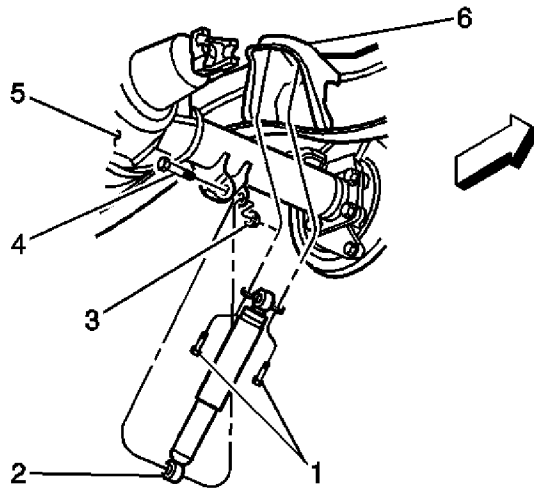
## Shock Absorber Replacement

### Removal Procedure



1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Remove the shock absorber upper mounting bolts (1).
3. Remove the shock absorber lower mounting nut (3) and the bolt (4).
4. Remove the shock absorber (2).

### Installation Procedure



1. Install the shock absorber (2).
2. Install the shock absorber lower mounting nut (3) and bolt (4).

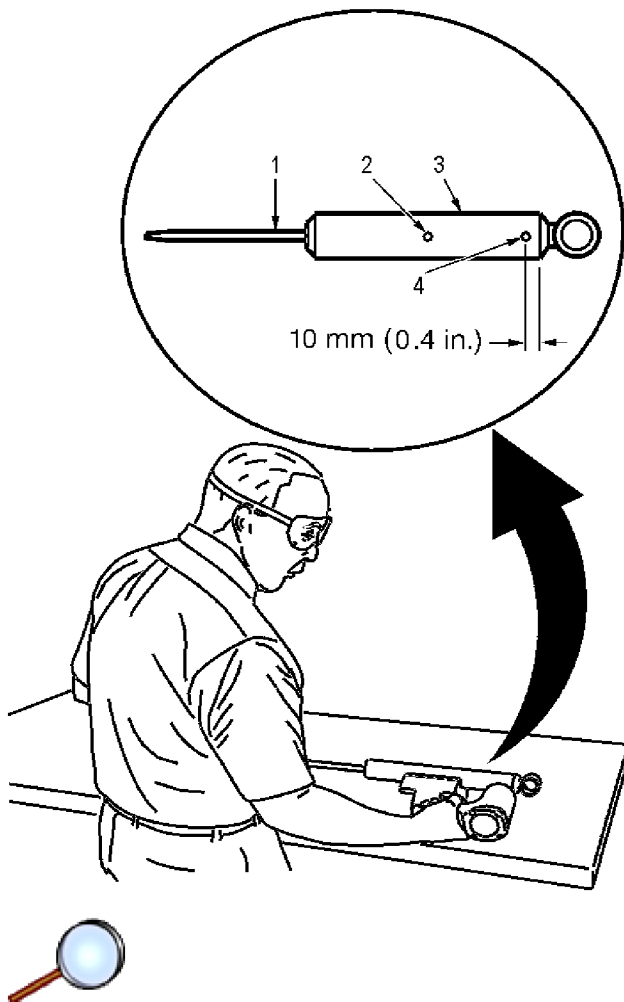
**Caution:** Refer to [Fastener Caution](#) in the Preface section.

3. Install the shock absorber upper mounting bolts (4).
  - Tighten the shock absorber upper mounting bolts to **25 N·m (18 lb ft)**.
  - Tighten the shock absorber lower mounting nut to **135 N·m (100 lb ft)**.
4. Lower the vehicle.

## 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.

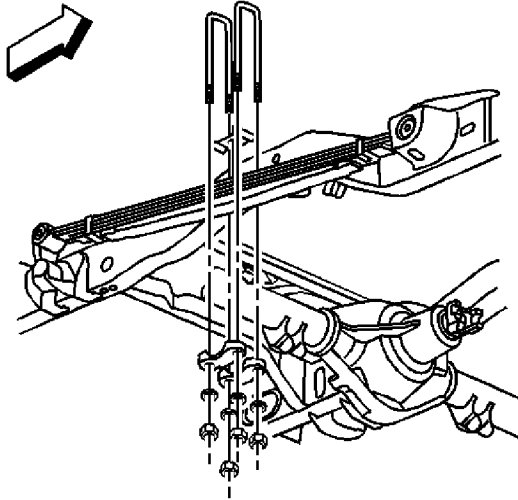
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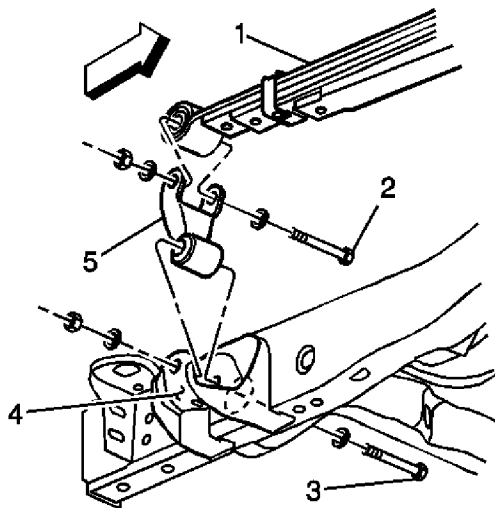
6. Remove the shock absorber from the vise. Hold the shock absorber over a drain pan horizontally with the holes down. Move the rod (1) in and out of the tube (3) to completely drain the oil from the shock absorber.

## Leaf Spring Replacement

### Removal Procedure

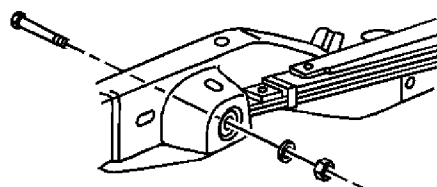
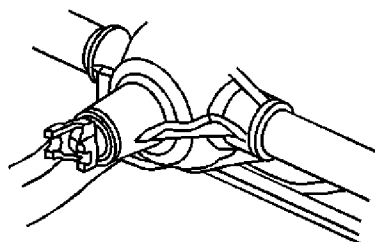


1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#)
2. Support the rear axle independently in order to relieve the tension on the leaf springs.
3. Remove the leaf spring U-bolt nuts.
4. Remove the leaf spring U-bolts.
5. Remove the leaf spring spacer.
6. Remove the leaf spring anchor plate.





7. Remove the mounting bolt and nut (3) from the leaf spring mounting bracket (4).
8. Remove the leaf spring (1) and spring shackle (5) as an assembly.



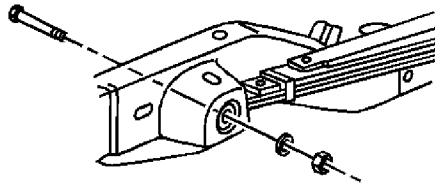
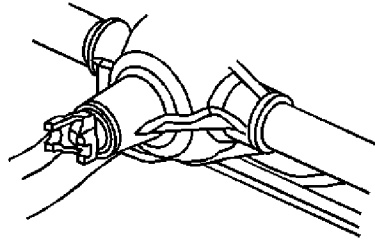
9. Remove the leaf spring to the front hanger bracket mounting nut and bolt.
10. Remove the leaf spring from the vehicle.
11. Remove the shackle from the leaf spring.

## Installation Procedure

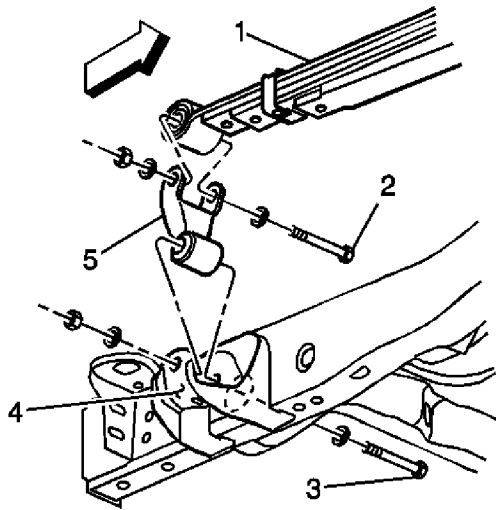
### **Note:**

- Install front and rear mounting bolt loose. DO NOT tighten the front and rear mounting bolts until the vehicle is at curb height.
- Tighten the U-bolts for the leaf spring before the vehicle is at curb height.

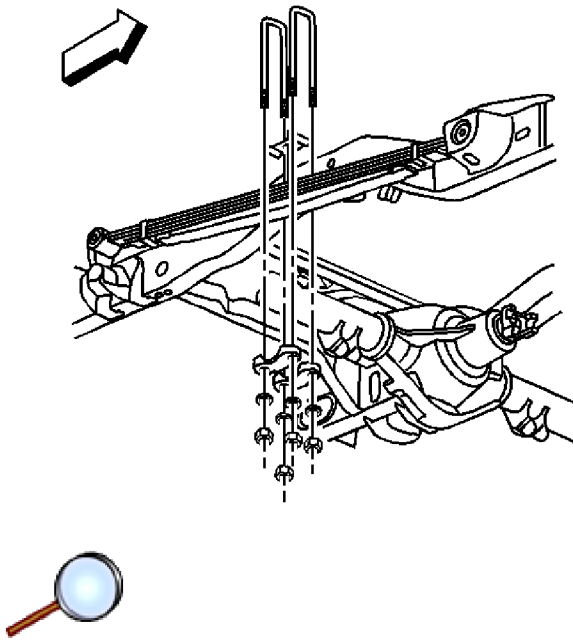
1. Perform the following procedure before installing the front hanger bracket mounting bolt.
  - 1.1. Remove all traces of the original adhesive patch.
  - 1.2. Clean the threads of the bolt with brake parts cleaner or the equivalent and allow to dry.
  - 1.3. Apply Threadlocker GM P/N 12345493 (Canadian P/N 10953488) to the threads of the bolt.
2. Install the shackle on the leaf spring.



3. Install the leaf spring to the vehicle.
4. Loosely install the leaf spring to the front hanger bracket mounting bolt and nut.



5. Install the leaf spring (1) to the leaf spring mounting bracket (4).



**Note:** Do not reuse the leaf spring U-bolts.

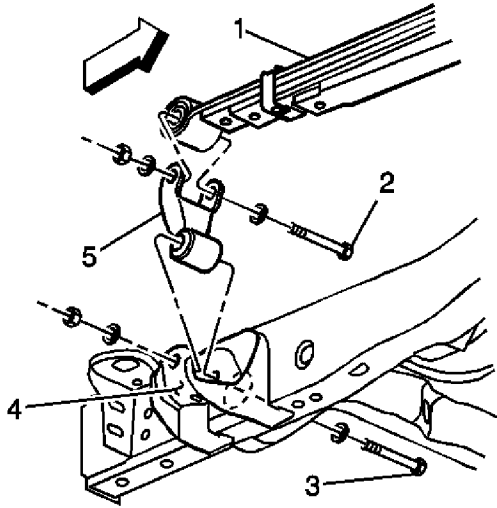
6. Install the leaf spring spacer.
7. Install the leaf spring U-bolts.
8. Install the leaf spring anchor plate.

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

9. Install the leaf spring U-bolt nuts.
  - Tighten the leaf spring U-bolt mounting nuts to **85 N·m (63 lb ft)** (All 1500 Series).
  - Tighten the leaf spring U-bolt mounting nuts to **140 N·m (103 lb ft)** plus 180 degrees.
10. Tighten the front hanger bracket and spring shackle mounting nuts.
  - Tighten the front hanger bracket mounting nut to **100 N·m (74 lb ft)** plus 210 degrees.
  - Tighten the leaf spring to front hanger mounting nut to **300 N·m (211 lb ft)** plus 140 degrees (W/14200 GVW).
  - Tighten the spring shackle to frame mounting nut to **115 N·m (85 lb ft)**.
  - Tighten the spring shackle to leaf spring mounting nut to **85 N·m (63 lb ft)**.
11. Remove the rear axle support.
12. Lower the vehicle.

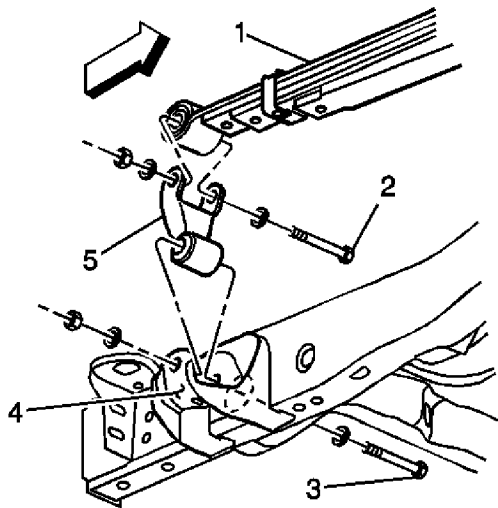
## Spring Shackle Replacement

### Removal Procedure



1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#).
2. Support the rear axle with a safety stand.
3. Remove the spring shackle (5) to the leaf spring (1) mounting nut and bolt (2).
4. Remove the spring shackle (5) to the frame bracket (4) mounting nut and bolt (3).
5. Remove the spring shackle.

### Installation Procedure



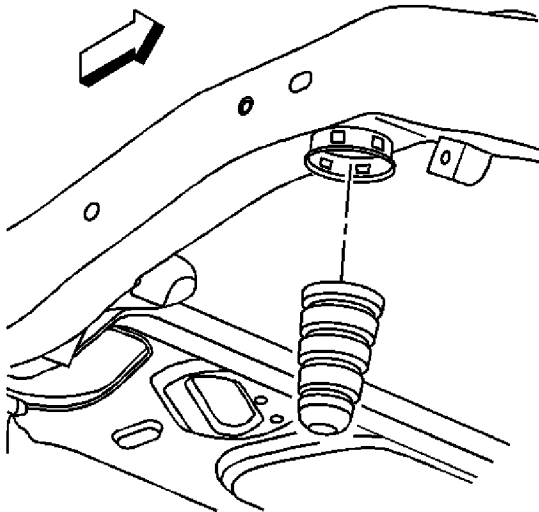
1. Install the spring shackle (5) to the leaf spring (1) and frame bracket (4).
2. Install the spring shackle (5) to frame bracket (4) mounting nut and bolt (3). Do not tighten the nut.

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

3. Install the spring shackle (5) to the leaf spring (1) mounting nut and bolt (2).
  - Tighten the spring shackle to frame mounting nut to **115 N·m (85 lb ft)**.
  - Tighten the spring shackle to leaf spring mounting nut to **85 N·m (63 lb ft)**.
4. Remove the rear axle support.
5. Lower the vehicle.

## Spring Bumper Replacement (1500 and 2500 w/7300 GVW)

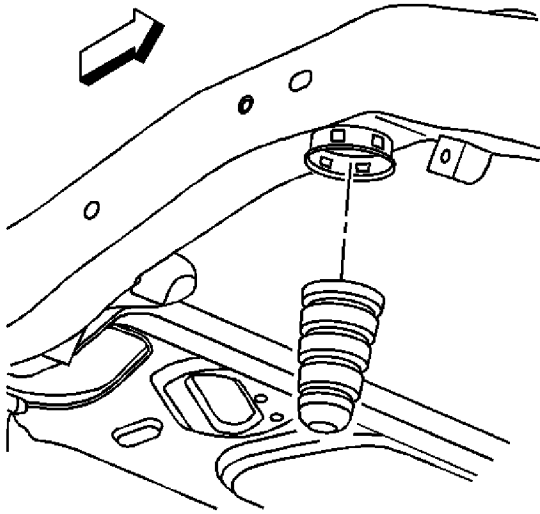
### Removal Procedure



1. Raise and support the vehicle. Refer to [Lifting and Jacking the Vehicle](#) .
2. Remove the jounce bumper.

### Installation Procedure

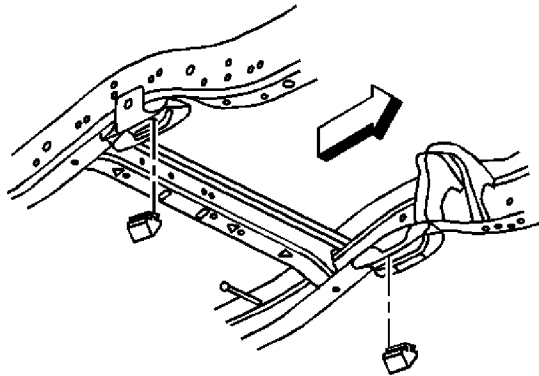




1. Install the jounce bumper.
2. Lower the vehicle.

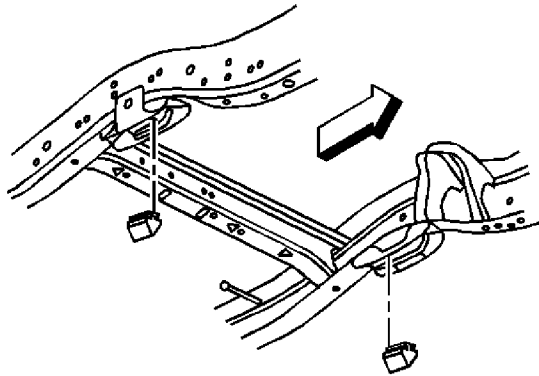
## Spring Bumper Replacement (2500 w/8500/8600 GVW and 3500-9Q4)

### Removal Procedure



1. Raise the vehicle. Refer to [Lifting and Jacking the Vehicle](#) .
2. Support the vehicle with suitable safety stands.
3. Lift upward on the front side of the bumper.
4. Slide the rear axle bumper forward in order to free the bumper from the bracket.

### Installation Procedure



1. Slide the bumper rearward.
2. Ensure that the rear axle bumper is seated into the bracket.
3. Remove the safety stands.
4. Lower the vehicle.

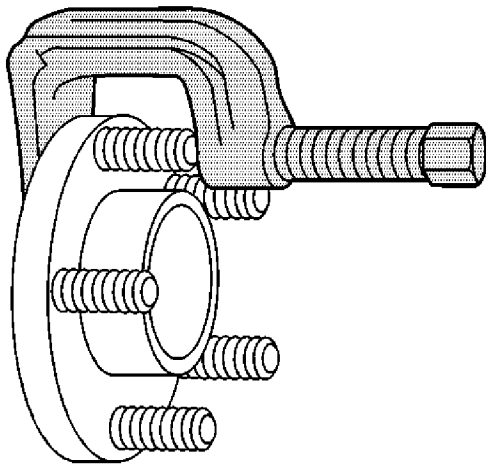
## Wheel Stud Replacement

### Tools Required

[J 43631](#) Ball Joint Remover

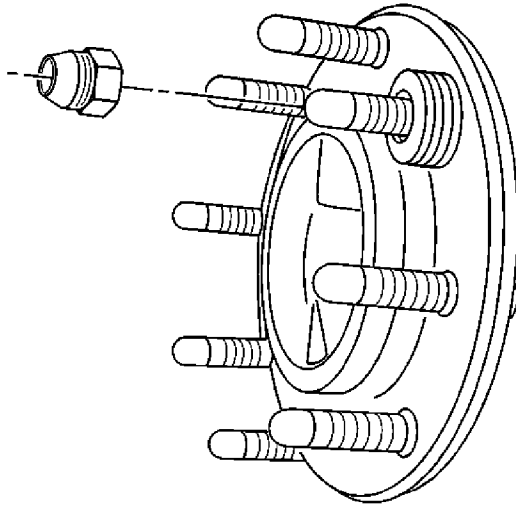
### Removal Procedure

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



4. Remove the wheel stud from the axle flange using the [J 43631](#) for the 15 series.
5. Remove the axle shaft for vehicles with 9.5 inch ring gear. Refer to [Rear Axle Shaft Replacement](#) .
6. Remove the rear hub assembly for vehicles with 10.5 inch ring gear. Refer to [Rear Axle Shaft Replacement](#) .
7. Remove the wheel stud from the axle flange using the [J 43631](#) .
8. Remove the wheel stud from the hub flange using the [J 43631](#) .

### Installation Procedure



1. Install the stud into the axle flange for the 15 series.
2. Install the 4 washers and the lug nut to the stud.
3. Tighten the lug nut in order to draw the stud into the flange until the stud fully seats.
4. Remove the lug nut and the washers.
5. Install the axle shaft for the vehicles with 9.5 inch ring gear. Refer to [Rear Axle Shaft Replacement](#) .
6. Install the rear hub assembly for the vehicles with 10.5 inch ring gear. Refer to [Rear Axle Shaft Replacement](#) .
7. Install the rotor. Refer to [Rear Brake Rotor Replacement](#) .
8. Install the tire and wheel. Refer to [Tire and Wheel Removal and Installation](#) .
9. Lower the vehicle.