



Revised May 2009

Dealer Service Instructions for:

Safety Recall H46 - Mopar Steering Linkage

NOTE: The service procedure for this recall has been revised and additional labor operations have been added. All previous copies of Safety Recall H46 should be discarded from your files.

Models

2003-2004 (DR) Dodge Truck 4x4 (2500/3500 series)

2005 (DH) Dodge Truck 4x4 (2500/3500 series)

2006-2009 (DH) Dodge Truck 4x4 (2500/3500 series or 1500 Mega Cab)

2006-2009 (D1) Dodge Truck 4x4 (3500 series)

2007-2009 (DC) Dodge Truck (3500 series cab chassis)

IMPORTANT: This recall only applies to vehicles that had certain Mopar service parts steering components installed.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

During a prior service appointment, a Mopar service parts steering linkage was installed on about 19,400 of the above vehicles. The drag link inner joint may fracture under certain driving conditions. This could result in a loss of steering control and cause a crash without warning.

Also, the steering damper bracket at the tie rod tube may loosen. This could allow the bracket to slide on the tube and may cause increased vehicle turning radius.

Repair

The steering linkage must be inspected and some steering linkage components may need to be replaced.

NOTE: The initial steering linkage inspection process can be done by write up personnel in the write up area (see Step 1 of the service procedure). Vehicles found with original style steering linkage can be immediately returned to the customer.

Parts Information

Part Number Description
CBD1H361 Damper Bracket Package

Each package contains the following components:

<u>Quantity</u>	<u>Description</u>
1	Bracket, Damper
2	U-Bolts
4	Nuts
1	Carriage bolt

Due to the small number of involved vehicles expected to require Damper Bracket Packages, no parts will be distributed initially. **Damper Bracket Packages should be ordered only after inspection determines that repair is required.** *Very few vehicles are expected to require Damper Bracket Packages.*

Part Number Description
CBFAH362 Drag Link Inner Joint Package

Each package contains the following components:

<u>Quantity</u>	<u>Description</u>
1	Joint, Drag Link Inner
1	Nut, Drag Link Inner Joint-to-Pitman Arm Retaining

Due to the small number of involved vehicles expected to require Drag Link Inner Joint Packages, no parts will be distributed initially. **Drag Link Inner Packages should be ordered only after inspection determines that repair is required.** *Very few vehicles are expected to require Drag Link Inner Packages.*

Parts Information (Continued)

<u>Part Number</u>	<u>Description</u>
CBCZH461	Arm, Pitman

<u>Part Number</u>	<u>Description</u>
06505623AA	Nut, Steering Drag Link Inner Joint

Special Tools

The following special tools may be required to perform this repair:

- 9615 Puller, Pitman Arm
- C-4150A Puller, Steering Drag Link Inner Joint

Service Procedure

NOTE: The initial steering linkage inspection process (Step 1 of the service procedure) can be done by write up personnel in the write up area. Vehicles found with the steering linkage shown in Figure 1 can be immediately returned to the customer. See the “Completion Reporting and Reimbursement” section of this recall for special claims processing information.

1. Look under the front of the vehicle and inspect the steering linkage at the steering damper mounting point:

- If the steering damper mounts to the tie rod tube as shown in Figure 1, the steering linkage is good. Return the vehicle to the customer. No further action is required.

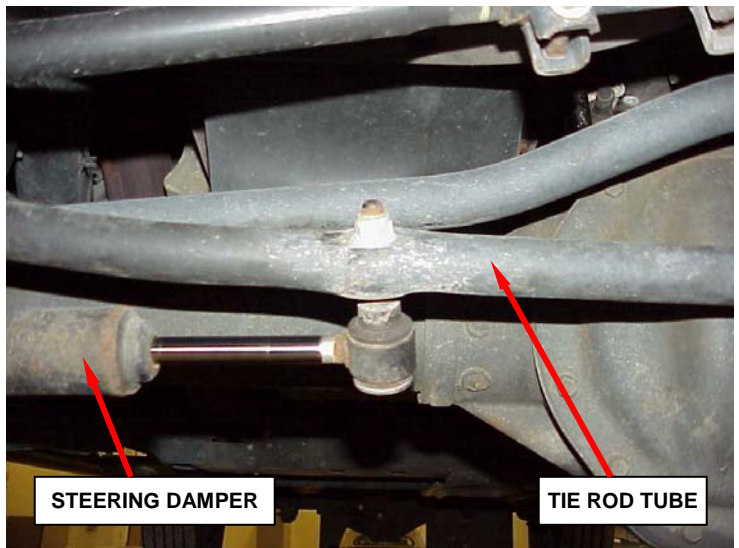


Figure 1 – Steering Linkage

- If the steering damper mounts to the tie rod tube as shown in Figure 2, the vehicle will require further inspection and/or repair by a technician. The vehicle should be assigned to a technician and the technician should continue with Step 2 of this procedure.

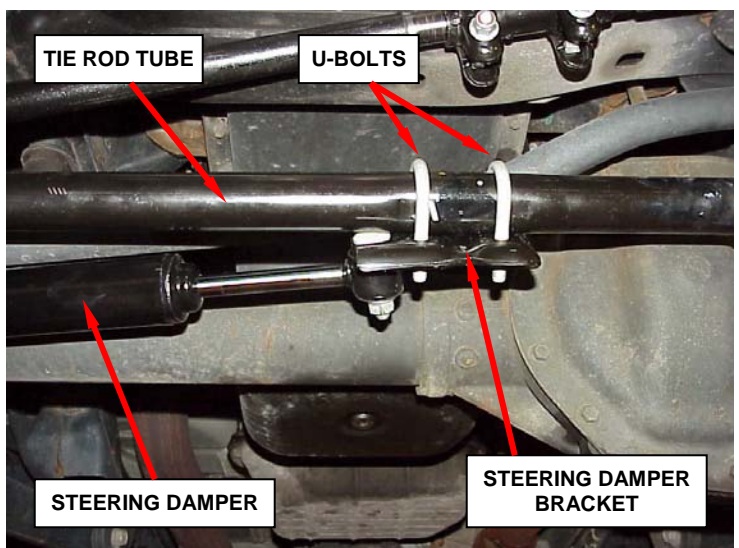


Figure 2 – Steering Linkage

Service Procedure (Continued)

2. Lift the vehicle on a hoist and inspect the steering linkage drag link for a white part number tag (Figure 3):

- If the steering linkage drag link **does not have a white part number tag**, continue with Step 3 of this procedure.
- If the steering linkage drag link **has a white part number tag**:
 - **For 2009 model year trucks**, continue with Step 9 of this procedure.
 - **For 2003 through 2008 model year trucks**, continue with Step 5 of this procedure.

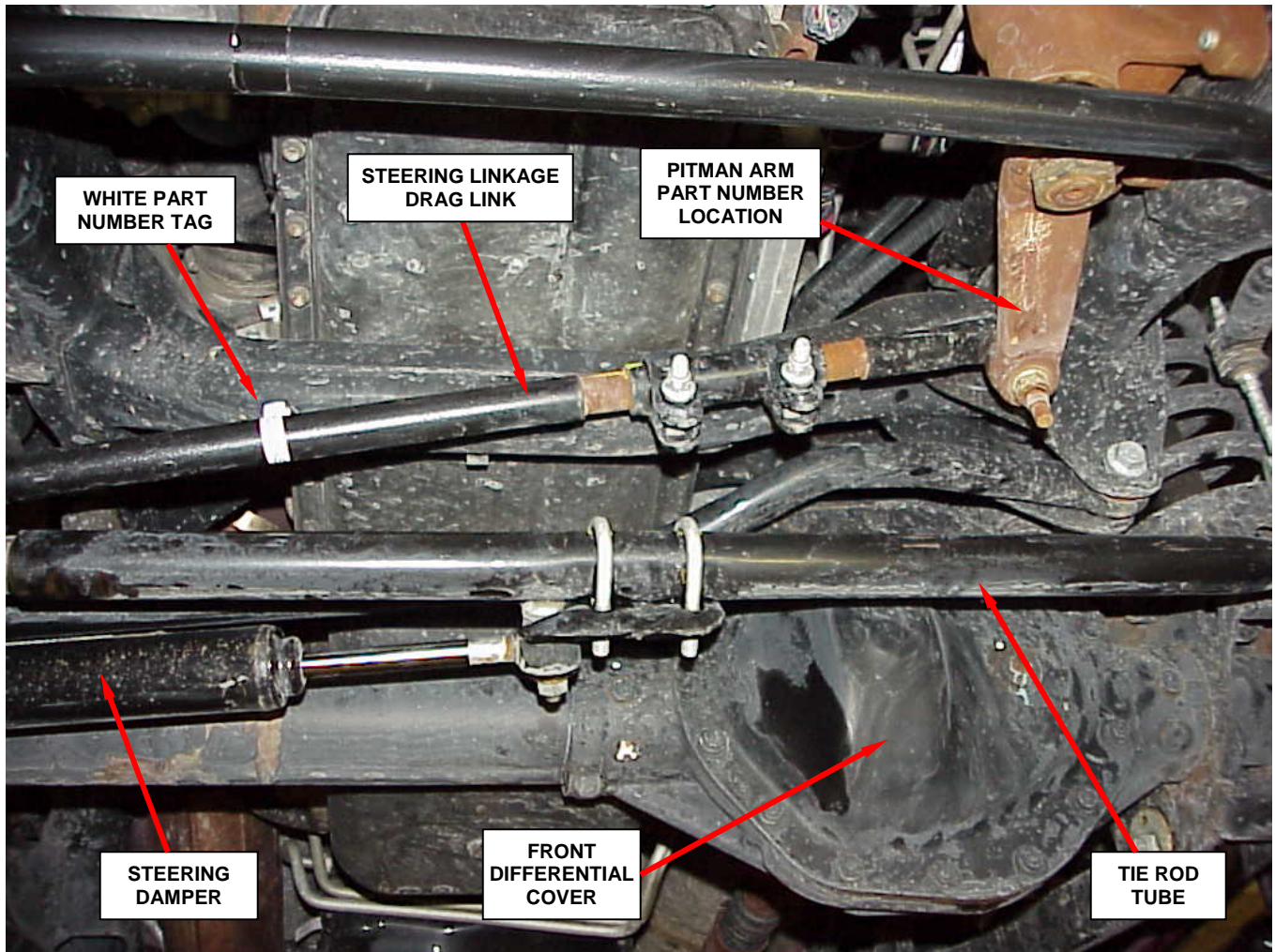


Figure 3 – Inspect for White Part Number Tag

Service Procedure (Continued)

3. Inspect the steering damper bracket to tie rod tube mounting u-bolt nuts by putting a 13 mm box-end wrench onto the nut (Figure 4):
 - If a **13 mm wrench fits** the steering damper bracket mounting u-bolt nuts, the bracket and fasteners **must be replaced**. Continue with Step 4 of this procedure.
 - If a **13 mm wrench does not fit** the steering damper bracket mounting u-bolt nuts, the bracket **does not require replacement**. Continue with Step 5 of this procedure.

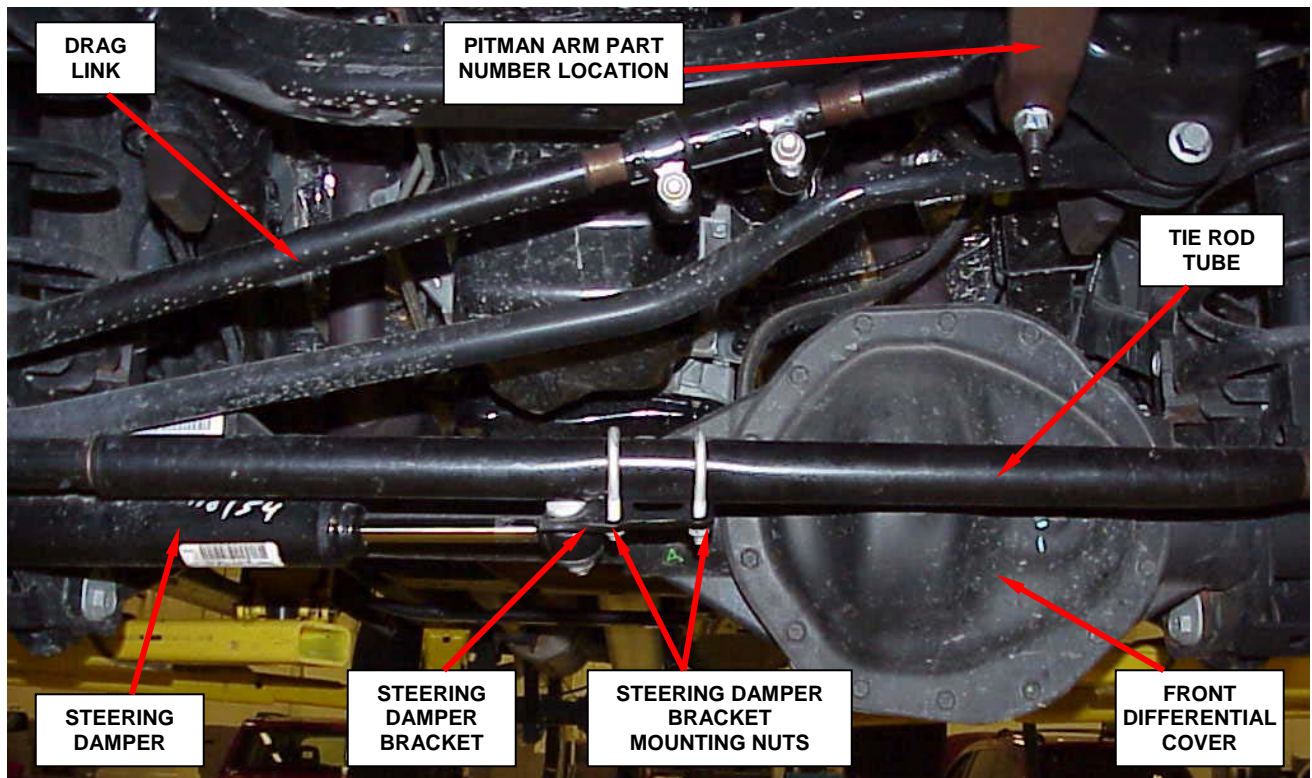


Figure 4 – Damper Bracket Inspection

Service Procedure (Continued)

4. Replace the steering damper bracket and fasteners using the following procedure:

- a. Remove and save the steering damper-to-damper bracket mounting nut (Figure 5).
- b. Disconnect the steering damper eyelet from the steering damper bracket.
- c. Remove and discard the four steering damper bracket nuts, two u-bolts and the steering damper bracket (Figure 5).

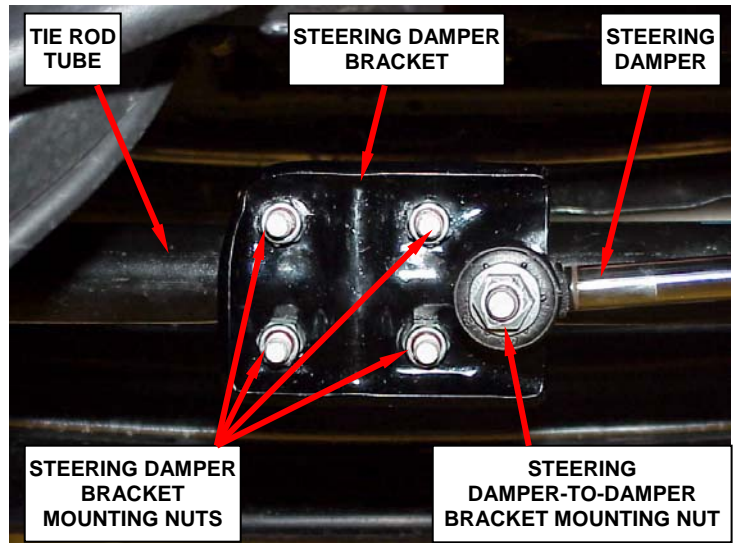


Figure 5 – Steering Damper Bracket

- d. Place the new steering damper carriage bolt through the square hole in the new steering damper bracket.
- e. Place the new steering damper bracket assembly onto the tie rod tube at the flat spot area on the tube and install the new u-bolts and nuts. Lightly snug the nuts to hold the steering damper bracket in position.
- f. Center the new steering damper bracket on the flattened area of the tie rod tube.
- g. Evenly tighten the four steering damper bracket u-bolt nuts to 25 ft. lbs. (34 N·m). Then tighten the four u-bolt nuts to 45 ft. lbs. (61 N·m).
- h. Connect the steering damper to the steering damper carriage bolt.
- i. Install the steering damper-to-damper bracket mounting nut and tighten to 75 ft. lbs. (100 N·m).
- j. Continue with Step 5 of this procedure.

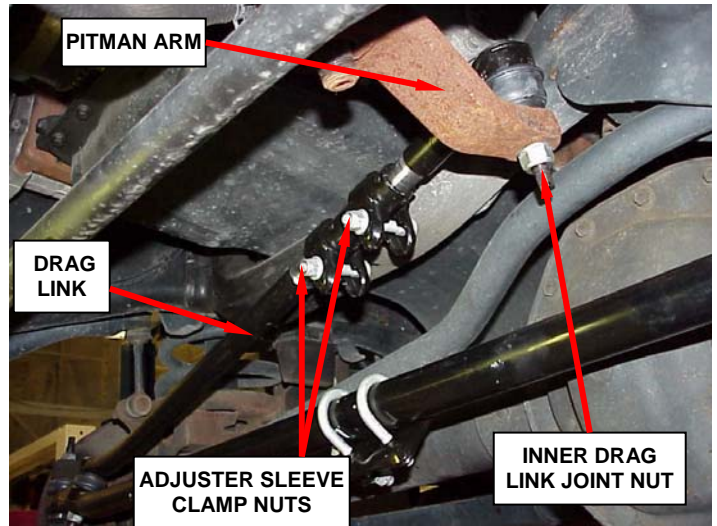
Service Procedure (Continued)

5. **For 2009 model year trucks**, continue with Step 6 of this procedure. **For 2003 through 2008 model year trucks**, inspect the pitman arm part number (Figure 6):
- If the part number cast into the bottom side of the pitman arm is 68039930AA the pitman arm does not require replacement.
 - Steering linkage **with** a white part number tag, continue with Step 9 of this procedure.
 - Linkage **without** a white part number tag, **replace the inner drag link joint**. Continue with Step 6 of this procedure.
 - If the part number cast into the bottom side of the pitman arm is 52106836AB, or is not legible:
 - Steering linkage **without** a white part number tag, **replace the inner drag link joint and pitman arm**. Continue with Step 7 of this procedure.
 - Steering linkage **with** a white part number tag, **replace the pitman arm**. Continue with Step 8 of this procedure.

**Figure 6 – Pitman Arm Identification**

Service Procedure (Continued)

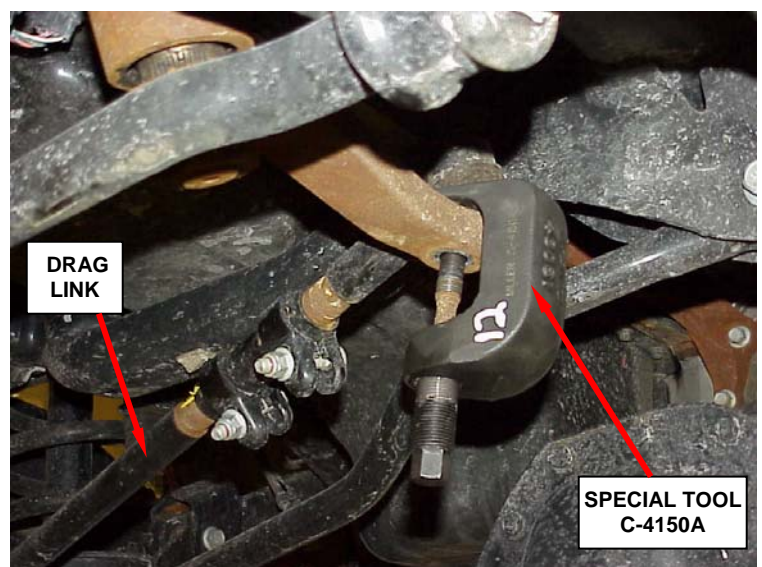
6. Replace the **inner drag link joint** using the following procedure:
 - a. Loosen both drag link adjuster sleeve clamp nuts (Figure 7).
 - b. Remove and discard the inner drag link joint to pitman arm nut (Figure 7).
 - c. Use Special Tool C-4150A to separate the steering inner drag link joint from the pitman arm (Figure 8).

**Figure 7 - Inner Drag Link Joint Nut**

- d. While counting the number of turns, unscrew the steering inner drag link joint from the drag link adjuster sleeve (right handed threads) and discard the drag link inner joint.

CAUTION: Do not allow the drag link adjuster sleeve to turn while unscrewing the inner drag link joint.

- e. Screw in the new inner drag link joint into the drag link adjuster sleeve the same number of turns counted in step 6d. of this procedure.
 - f. Connect the steering inner drag link joint to the pitman arm.
 - g. Install the new steering inner drag link joint nut and tighten the nut to 100 ft. lbs. (135 N·m).

**Figure 8 – Special Tool C-4150A**

Service Procedure (Continued)

- h. With the wheels in the straight ahead position, make sure that **both inner and outer steering drag link joint caps** are centered over the joint ball stud (Figure 9).

CAUTION: Failure to center the drag link inner and outer joint caps over the joint ball studs before tightening the drag link adjuster sleeve clamps could cause joint failure.

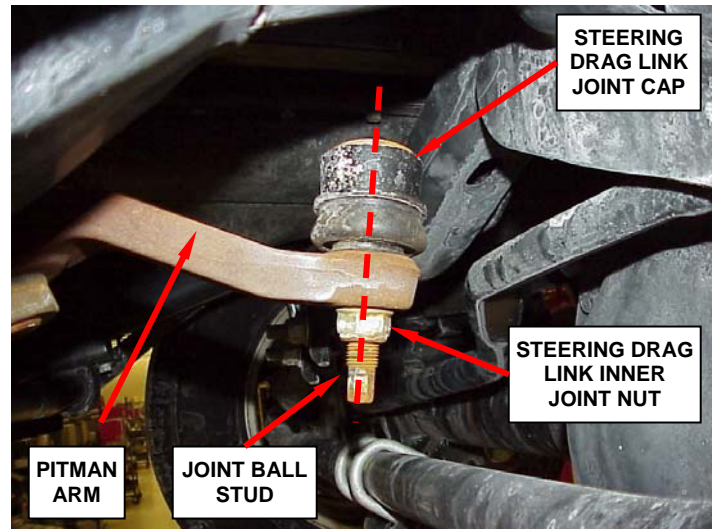


Figure 9 – Drag Link Joint Cap Alignment

- i. With the adjuster sleeve clamps rotated 45 degrees forward, tighten both drag link adjuster sleeve clamp nuts to 45 ft. lbs. (61 N·m).

CAUTION: The drag link adjuster sleeve clamp tabs must be pointing approximately 45 degrees forward before tightening (as shown in Figure 10). Do not allow the adjuster sleeve clamp tabs to hang straight down.

- j. Lower the vehicle from the hoist.
- k. Drive the vehicle to verify that the steering wheel is straight.
- If the steering wheel is turned to the left, **shorten** the drag link at the adjuster sleeve located on the drag link.
 - If the steering wheel is turned to the right, **lengthen** the drag link at the adjuster sleeve located on the drag link.

- l. Repeat Step 6k. until steering wheel is straight.

- m. Continue with Step 9 of this procedure.

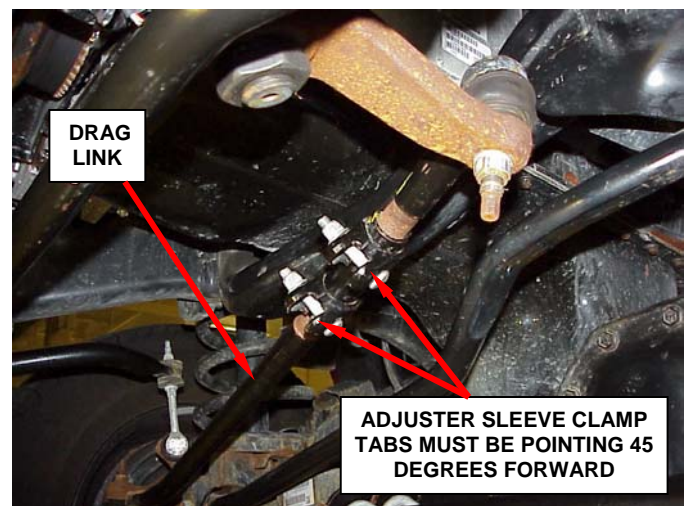
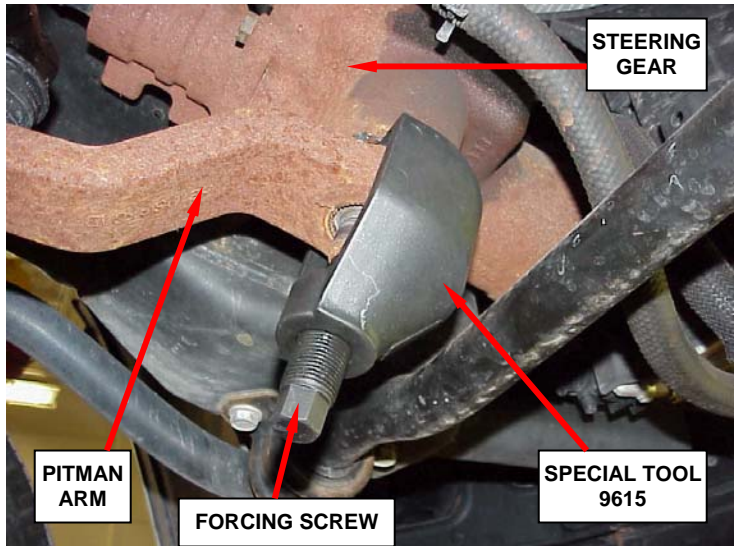


Figure 10 – Clamp Tabs at 45 Degree Angle

Service Procedure (Continued)

7. Replace the **inner drag link joint** and **pitman arm** using the following procedure:
 - a. Loosen both drag link adjuster sleeve clamp nuts (Figure 7).
 - b. Remove and save the pitman arm retaining nut located on the steering gear output shaft.
 - c. Install pitman arm puller (Special Tool 9615) onto the steering gear output shaft (Figure 11).

**Figure 11 - Special Tool 9615**

CAUTION: Failure to use the correct pitman arm puller could cause damage to the steering gear.

- d. Tighten the pitman arm puller forcing screw until the pitman arm separates from the steering gear output shaft (Figure 11).
- e. While counting the number of turns, unscrew the steering inner drag link joint (with pitman arm still attached) from the drag link adjuster sleeve (right handed threads) and discard the pitman arm and inner drag link joint.

CAUTION: Do not allow the drag link adjuster sleeve to turn while unscrewing the inner drag link joint.

- f. Screw in the new steering inner drag link joint into the drag link adjuster sleeve the same number of turns counted in step 7e. of this procedure.
- g. Install the new pitman arm and retaining nut onto the steering gear output shaft. Tighten the pitman arm nut to 225 ft. lbs. (300 N·m).
- h. Connect the steering inner drag link joint to the pitman arm.
- i. Install the new steering inner drag link joint nut and tighten the nut to 100 ft. lbs. (135 N·m).

Service Procedure (Continued)

- j. With the wheels in the straight ahead position, make sure that **both inner and outer steering drag link joint caps** are centered over the joint ball stud (Figure 12).

CAUTION: Failure to center the drag link inner and outer joint caps over the joint ball studs before tightening the drag link adjuster sleeve clamps could cause joint failure.

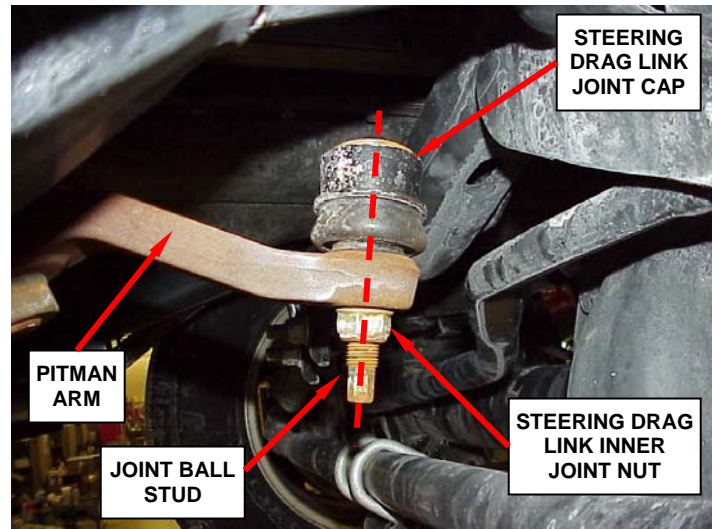


Figure 12 – Drag Link Joint Cap Alignment

- k. With the adjuster sleeve clamps rotated 45 degrees forward, tighten the drag link adjuster sleeve clamp nuts to 45 ft. lbs. (61 N·m).

CAUTION: The drag link adjuster sleeve clamp tabs must be pointing approximately 45 degrees forward before tightening (as shown in Figure 10). Do not allow the adjuster sleeve clamp tabs to hang straight down.

- l. Lower the vehicle from the hoist.
- m. Drive the vehicle to verify that the steering wheel is straight.
- If the steering wheel is turned to the left, **shorten** the drag link at the adjuster sleeve located on the drag link.
 - If the steering wheel is turned to the right, **lengthen** the drag link at the adjuster sleeve located on the drag link.
- n. Repeat Step 7m. until steering wheel is straight.
- o. Continue with Step 9 of this procedure.

Service Procedure (Continued)

8. Replace the **pitman arm** using the following procedure:
 - a. Remove and discard the inner drag link joint nut (Figure 13).

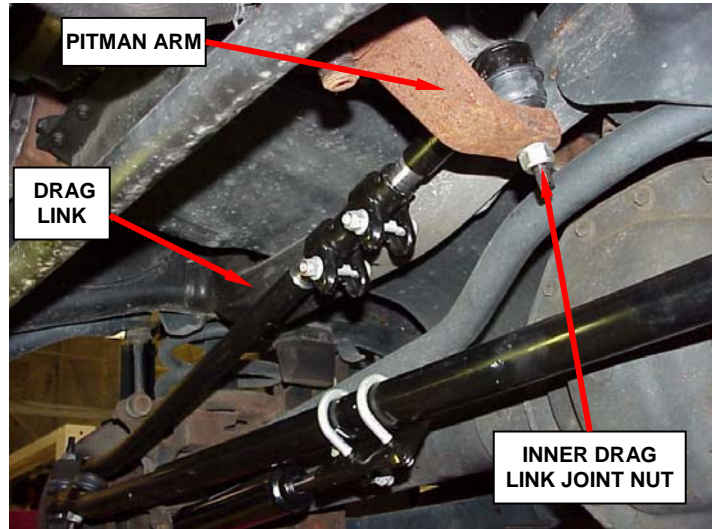


Figure 13 - Inner Drag Link Joint Nut

- b. Use Special Tool C-4150A to separate the steering inner drag link joint from the pitman arm (Figure 14).

CAUTION: Use extreme care not to tear, nick or damage the inner drag link joint rubber boot.

- c. Remove and save the pitman arm retaining nut located on the steering gear output shaft.

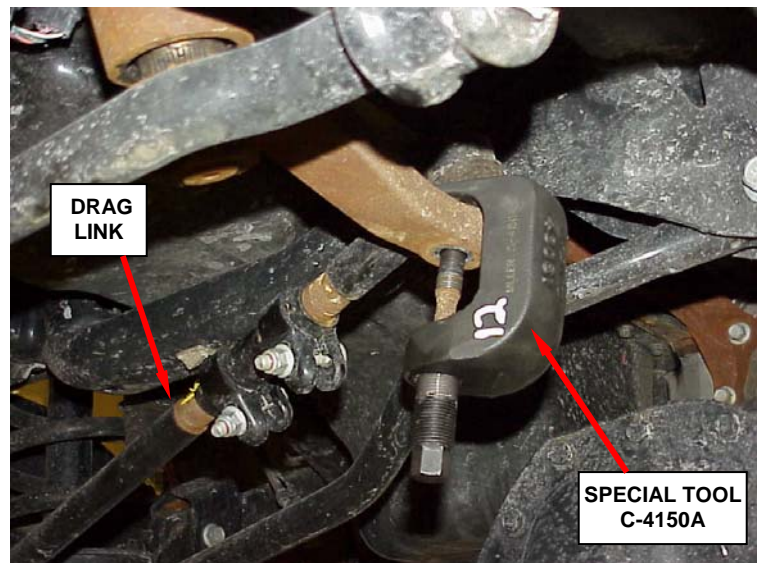


Figure 14 – Special Tool C-4150A

Service Procedure (Continued)

- d. Install pitman arm puller (Special Tool 9615) onto the steering gear output shaft (Figure 15).

CAUTION: Failure to use the correct pitman arm puller could cause damage to the steering gear.

- e. Tighten the pitman arm puller forcing screw until the pitman arm separates from the steering gear output shaft (Figure 15).

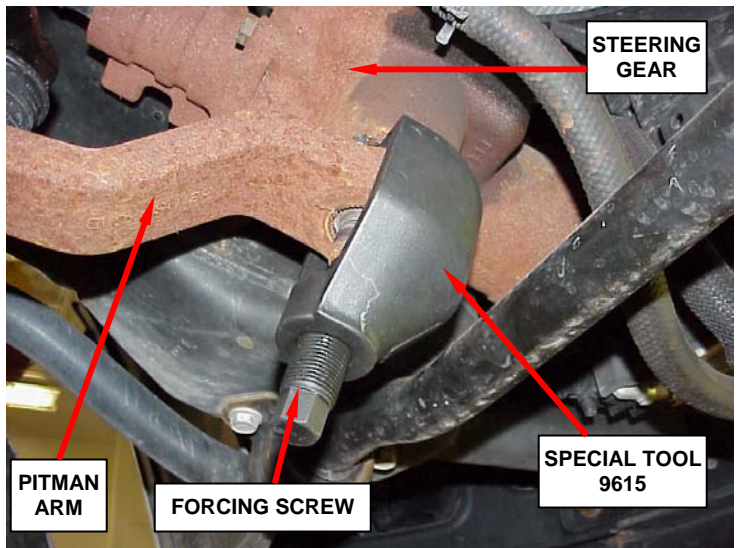


Figure 15 - Special Tool 9615

- f. Install the new pitman arm.
- g. Install the pitman arm retaining nut onto the steering gear output shaft. Tighten the pitman arm nut to 225 ft. lbs. (300 N·m).
- h. Connect the steering inner drag link joint to the pitman arm.
- i. Install the new steering inner drag link joint nut and tighten the nut to 100 ft. lbs. (135 N·m).
- j. Lower the vehicle from the hoist.
- k. Drive the vehicle to verify that the steering wheel is straight.
- If the steering wheel is turned to the left, **shorten** the drag link at the adjuster sleeve located on the drag link.
 - If the steering wheel is turned to the right, **lengthen** the drag link at the adjuster sleeve located on the drag link.
- l. Repeat Step 8k. until steering wheel is straight.
- m. Continue with Step 9 of this procedure.

Service Procedure (Continued)

9. Verify the lower surface of the left outer tie rod socket is parallel to the upper surface of the left knuckle attaching arm using the following procedure:
 - a. Loosen the tie rod tube adjuster sleeve clamps.
 - b. Rotate the left tie rod until the bottom of the tie rod socket is parallel to the top of the left steering knuckle arm (Figure 16).
 - c. Tighten the tie rod adjuster sleeve clamp nuts to 45 ft. lbs. (61 N·m).

CAUTION: Failure to align the left tie rod end parallel to the steering knuckle could cause tie rod end damage.

- d. Return the vehicle to the customer.

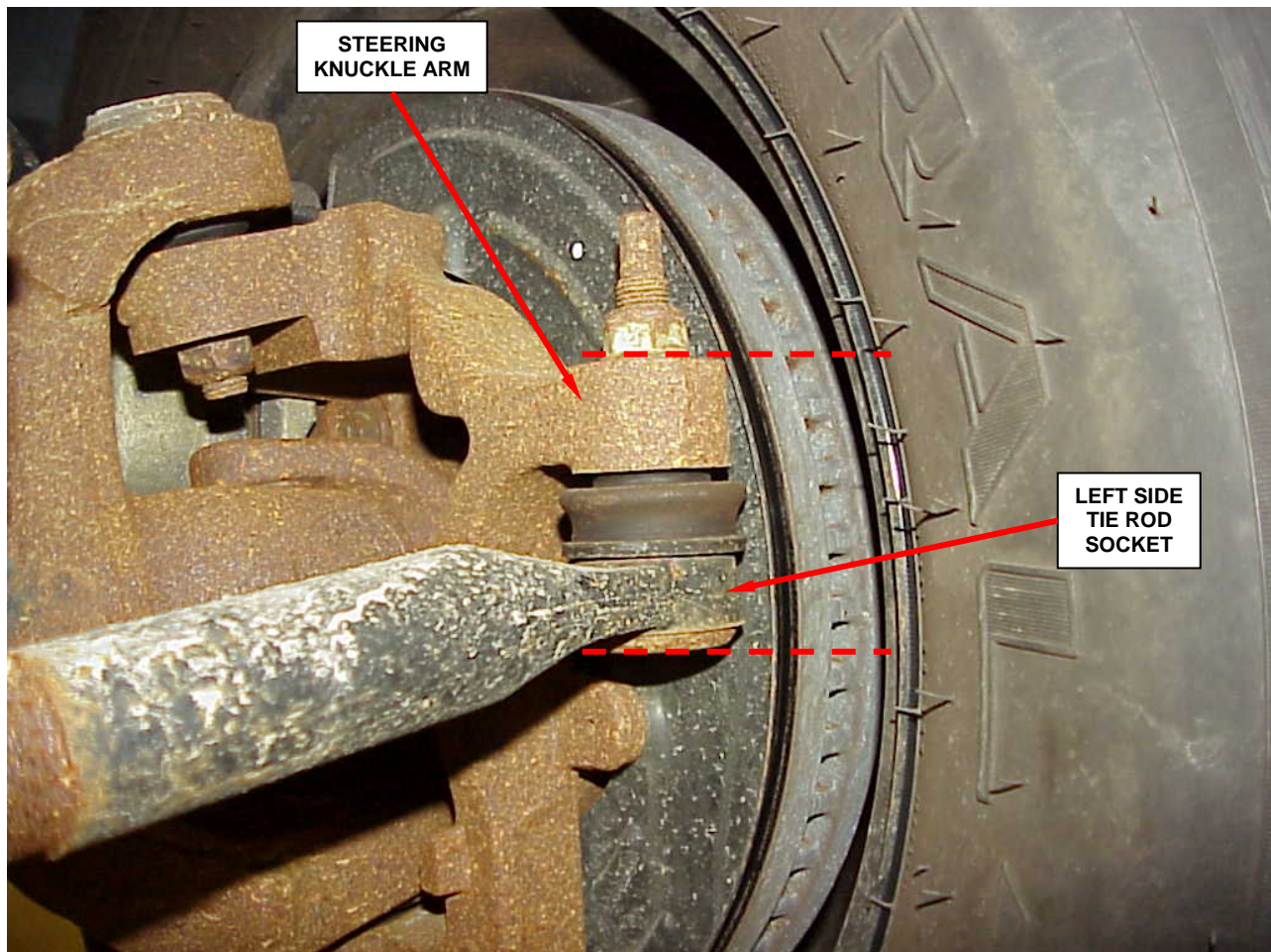


Figure 16 – Align Left Tie Rod Socket Parallel to Left Steering Knuckle

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by Chrysler to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Inspect steering linkage in write up area	19-H4-61-81	No Charge
Additional steering linkage inspection by technician and center left tie rod end	19-H4-62-81	0.2 hours
Inspect steering linkage, replace inner drag link joint only, and center left tie rod end	19-H4-61-82	0.4 hours
Inspect steering linkage, replace pitman arm only and center left tie rod end	19-H4-61-83	0.5 hours
Inspect steering linkage, replace steering damper bracket, replace inner drag link joint, and center left tie rod end	19-H4-62-83	0.6 hours
Inspect steering linkage, replace pitman arm, inner drag link joint and center left tie rod end	19-H4-61-84	0.6 hours
Inspect steering linkage, replace pitman arm inner drag link joint, steering damper bracket, and center left tie rod end	19-H4-61-85	0.7 hours

Related Operation

Center steering wheel	19-H4-61-50	0.1 hours
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Add the cost of the recall parts package plus applicable dealer allowance to your claim.

FOR VEHICLES INSPECTED IN THE WRITE UP AREA: Enter “INSPECT” in the part number section of your claim with a quantity of one (1). Enter \$5.00 WITH NO MARK-UP for reimbursement of steering linkage inspection performed in the write up area.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to Chrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner’s name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer’s VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services Field Operations
Chrysler



SAFETY RECALL H46 – MOPAR STEERING LINKAGE

Dear: (Name)

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Chrysler has decided that a defect, which relates to motor vehicle safety, exists in some **2003 through 2009 model year Dodge trucks.**

The problem is... During a prior service appointment, a Mopar service parts steering linkage may have been installed on your truck (VIN: xxxxxxxxxxxxxxxxxxxx). The drag link inner joint may fracture under certain driving conditions. This could result in a loss of steering control and cause a crash without warning.

Also, the steering damper bracket at the tie rod tube may loosen. This could allow the bracket to slide on the tube and may cause increased vehicle turning radius.

What your dealer will do... Chrysler will repair your vehicle free of charge (parts and labor). To do this, your dealer will inspect the steering linkage on your truck and replace steering linkage component(s) if required. The inspection will take less than ½ hour. If linkage replacement is required, the work will take an additional ½ hour to complete. However, additional time may be necessary depending on service schedules.

What you must do to ensure your safety... If your Dodge truck had any steering repairs after March 1, 2008 or you do not know the service history of your vehicle, **contact your dealer** right away to schedule a service appointment. Ask the dealer to hold the parts for your vehicle or to order them before your appointment. **Remember to bring this letter with you to your dealer.**

If you need help... If you have questions or concerns which your dealer is unable to resolve, please contact Chrysler at 1-800-853-1403.

Please help us update our records by filling out the attached prepaid postcard, if any of the conditions listed on the card apply to you or your vehicle. You may also update this information on the web at
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If you have already experienced this condition and have paid to have it repaired, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: Chrysler Recall Customer Assistance, P.O. Box 21-8007, Auburn Hills, MI 48321-8007, Attention: Reimbursement.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to <http://www.safercar.gov>.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services Field Operations
Chrysler
Notification Code H46

Note to lessors receiving this recall: Federal regulation requires that you forward this recall notice to the lessee within 10 days.