



Revised October 2012

Distributor/Dealer Service Instructions for:

Safety Recall L16 - Left Tie Rod

NOTE: A date range has been added for steering linkage replacement with Mopar service parts.

Models

2008 (DH) Ram Truck 2500 series (4x4)

NOTE: This recall applies only to the above vehicles equipped with four wheel drive and built at the St Louis Assembly Plant ("J" in the 11th VIN Position) from February 14, 2008 through September 22, 2008 (MDH 021400 through 092217).

2008 (DH) Ram Truck 1500 Mega Cab (4x4)

2008 - 2009 (DH) Ram Truck 2500 (4x4)

2008 - 2009 (D1) Ram Truck 3500 (4x4)

2010 - 2011 (DJ) Ram Truck 2500 (4x4)

2010 - 2011 (D2) Ram Truck 3500 (4x4)

2008 - 2010 (DC) Ram Truck 3500 Cab Chassis

2011 (DD) Ram Truck 3500 Cab Chassis

NOTE: This recall applies only to the above vehicles built at the Saltillo Assembly Plant ("G" in the 11th VIN Position) from February 14, 2008 through March 28, 2011 (MDH 021400 through 032823).

Models (Continued)

2003 – 2004	(DR) Ram Truck 2500/3500 (4x4)
2006 – 2008	(DH) Ram Truck 1500 Mega Cab (4x4)
2006 – 2008	(D1) Ram Truck 3500 (4x4)
2007 – 2008	(DC) Ram Truck 3500 Cab Chassis
2005 – 2008	(DH) Ram Truck 2500 (4x4)
2005	(DH) Ram Truck 3500 (4x4)

NOTE: This recall applies only to the above vehicles that were built between July 12, 2002 and February 13, 2011 and had the steering linkage replaced with Mopar service parts between February 14, 2008 and August 09, 2011.

IMPORTANT: Some of the involved vehicles may be in distributor/dealer used vehicle inventory. Distributors/Dealers should complete this recall service on these vehicles before retail delivery. Distributors/Dealers should also perform this repair on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry.

Subject

The left tie rod ball stud on about 208,000 of the above vehicles may fracture under certain driving conditions. This could cause a loss of directional control and/or a crash without warning.

The same vehicles may also have a loose front track bar bolt. This could cause a rattle or banging noise under certain driving conditions.

Repair

The vehicle must be inspected for the type of steering linkage the vehicle is equipped with and those found with a certain linkage configuration must have the right and left tie rod angles measured. If the tie rod angles are not within specification, the left tie rod must be replaced.

Also, the front track bar mounting bolt must be tightened to the proper torque specification on all affected vehicles.

Parts Information

<u>Part Number</u>	<u>Description</u>
CBRCL160AA	Left Tie Rod Package

Each package contains the following components:

<u>Quantity</u>	<u>Description</u>
1	Tie Rod
1	Nut, Hex Lock

Each dealer to whom vehicles in the recall were assigned will receive enough Left Tie Rod Packages to service about 5% of those vehicles.

Special Tools

The following special tool is required to perform this repair:

- 10326 Kit, Tie Rod Alignment
- 8677 Puller, Tie Rod

NOTE: Special Tool 10326 was released to dealers in November of 2010. Service Bulletin 19-001-11 was also issued to alert dealers to the new service tool and procedure for setting toe on the affected, and all subsequent, vehicles.

Service Procedure

A. Inspect Steering Linkage Type

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. Continue with **Section D. Tighten Front Track Bar Bolt.**

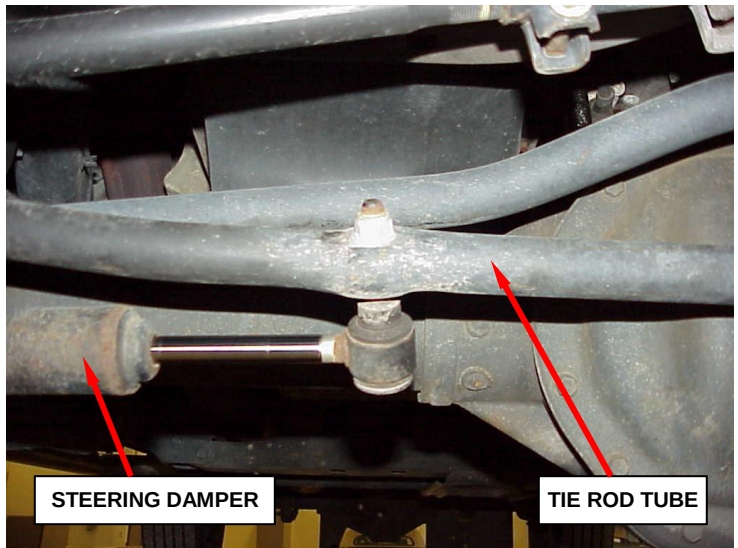


Figure 1 – Steering Linkage

- If the steering damper mounts to the tie rod tube as shown in Figure 2, the vehicle will require further inspection and/or repair. Continue with **Section B. Inspect Tie Rod Angles.**

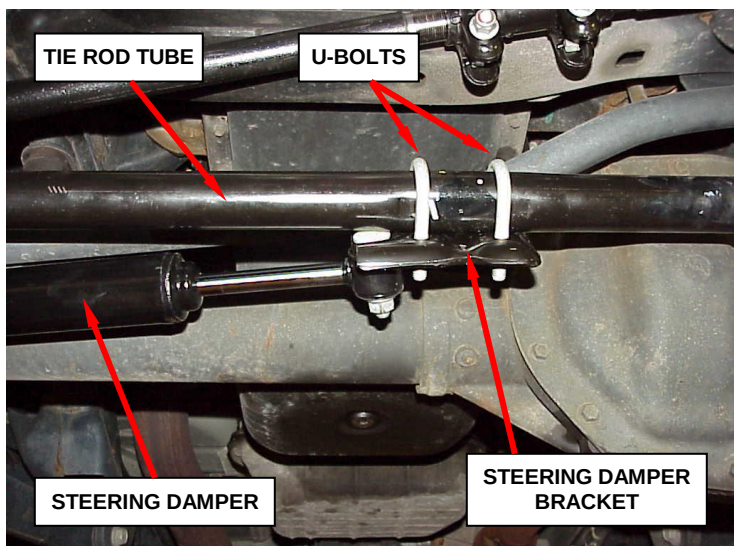
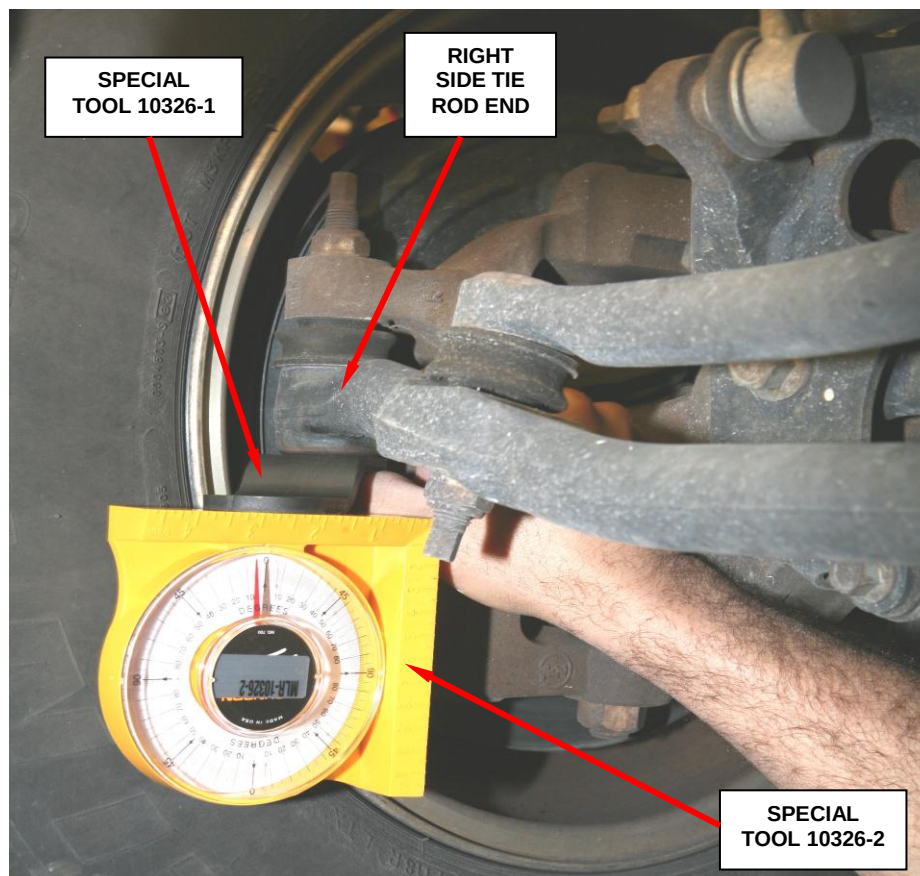


Figure 2 – Steering Linkage

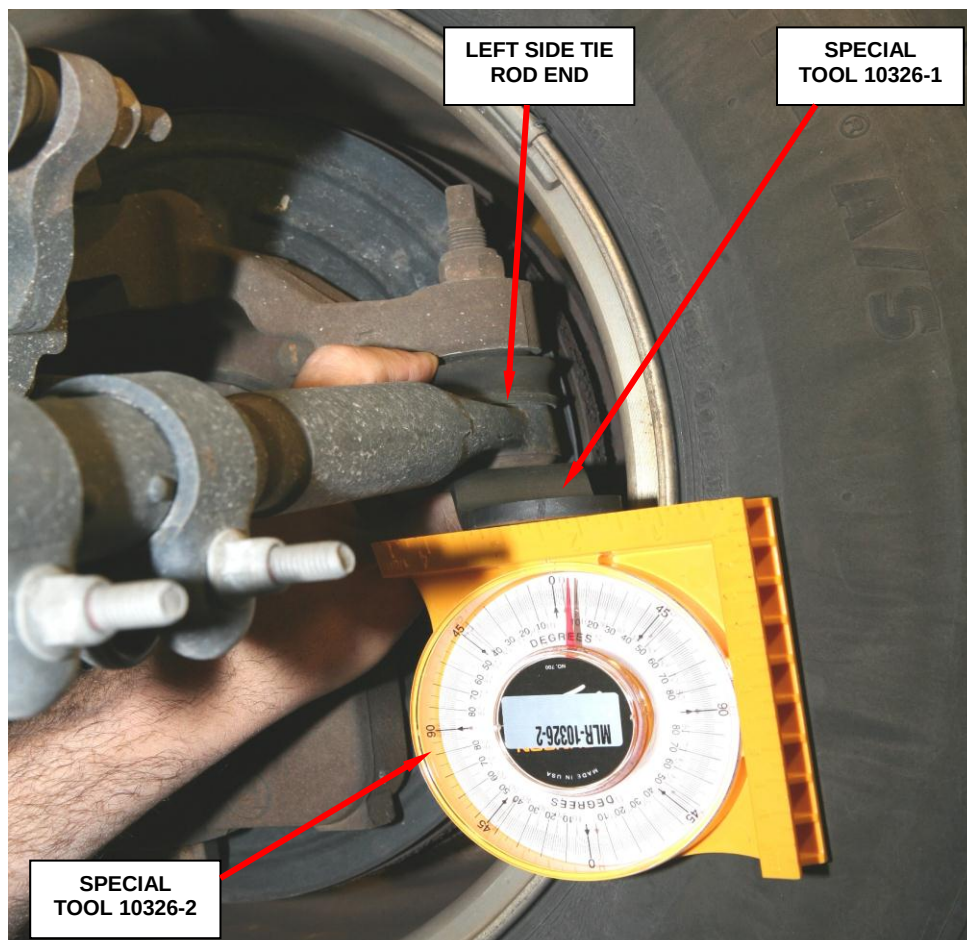
Service Procedure**B. Inspect Tie Rod Angles**

1. The vehicle must meet the following criteria before measuring the tie rod angles:
 - Vehicle on level surface.
 - Full vehicle weight on front tires.
 - Bottom side of both tie rods must be clean and free of any burrs.
2. Install Special Tool 10326-1 and 10326-2 onto the bottom surface of the right side tie rod as shown in Figure 3. Special Tool 10326-1 should be centered on the tie rod.
3. Measure the angle of the right side tie rod. Record the number displayed on the inclinometer gauge.

**Figure 3 - Measure Right Side Tie Rod Angle**

Service Procedure (Continued)

4. Install Special Tool 10326-1 and 10326-2 onto the bottom surface of the left side tie rod as shown in Figure 4. Special Tool 10326-1 should be centered on the tie rod.
5. Measure the angle of the left side tie rod. Record the number displayed on the inclinometer gauge.
6. Determine how many degrees difference there is between the right and left tie rod:
 - If the difference in the angle of the right and left tie rod is 5 degrees or less, the tie rod does not need to be replaced. Continue with **Section D. Tighten Front Track Bar Bolt.**
 - If the difference in the angle of the right and left tie rod is more than 5 degrees, replace the tie rod. Continue with **Section C – Replace Left Tie Rod.**

**Figure 4 - Measure Left Side Tie Rod Angle**

Service Procedure (Continued)

C. Replace Left Tie Rod

1. Lift the vehicle on an appropriate hoist.
2. Remove the left front wheel.
3. Loosen the left tie rod adjuster clamp nut and bolt (Figure 5).
4. Apply Mopar Rust Penetrant (P/N 04318039AC) or equivalent to the tie rod threads (Figure 3).

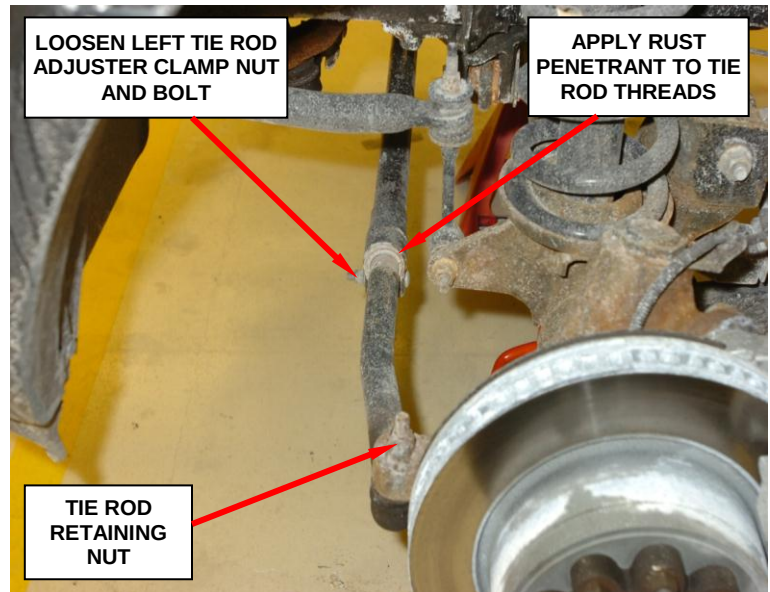


Figure 5 – Steering Components

5. Remove and discard the tie rod retaining nut (Figure 5).
6. Separate the tie rod from the left knuckle using Special Tool 8677 (Figure 6).
7. While counting the number of turns, unscrew the original tie rod from the drag link. Record the number of turns.

NOTE: The threads on the tie rod are right handed threads.

8. Discard the original tie rod.



Figure 6 – Special Tool 8677

Service Procedure (Continued)

9. Apply a light coat of Mopar Anti-Seize Lubricant (P/N05012249AB) or equivalent to the threads of the new tie rod (Figure 7).
10. Thread the new tie rod into the drag link the number of turns noted in Step 7 of this procedure.

NOTE: There should be the same amount of exposed threads on each side of the tie rod sleeve.



Figure 7 – Apply Light Coat of Anti-Seize

11. Clean the tapered bore in the steering knuckle with Mopar Brake Cleaner (P/N 04897150AB) or equivalent (Figure 8).

CAUTION: Failure to clean the steering knuckle arm tapered hole may cause the tie rod connection to the steering knuckle to not seat properly. The steering knuckle arm tapered hole must be clean and dry.

12. Remove any grease or dirt from the tie rod stud before installing the stud into the steering knuckle arm tapered hole (Figure 8).
13. Place the tie rod stud into the steering knuckle arm and install the tie rod retaining nut. Tighten the nut to 75 ft. lbs. (102 N·m).

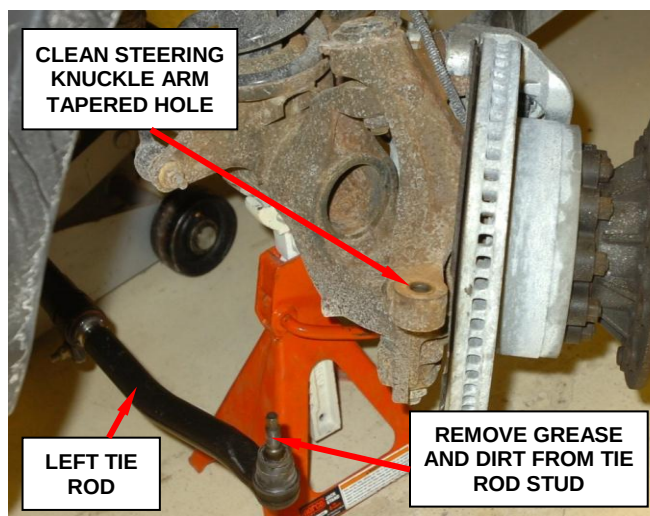


Figure 8 – Clean Steering Knuckle Arm Tapered Hole and Tie Rod Stud

Service Procedure (Continued)

14. Snug the left tie rod adjuster clamp nut and bolt.

15. Install the left front wheel. Tighten the wheel lug nuts to:
 - Lug Nut 9/16 x 18 with 60° Cone (1500) 130 ft. lbs. (176 N·m).
 - Lug Nut 9/16 x 18 with 60° Cone (2500, 3500 - SRW) 140 ft. lbs. (190 N·m).
 - Lug Nut 9/16 x 18 with Flat Washer (3500 - DRW) 145 ft. lbs. (197 N·m).

16. Lower the vehicle from the hoist and move the vehicle to an appropriate alignment rack.

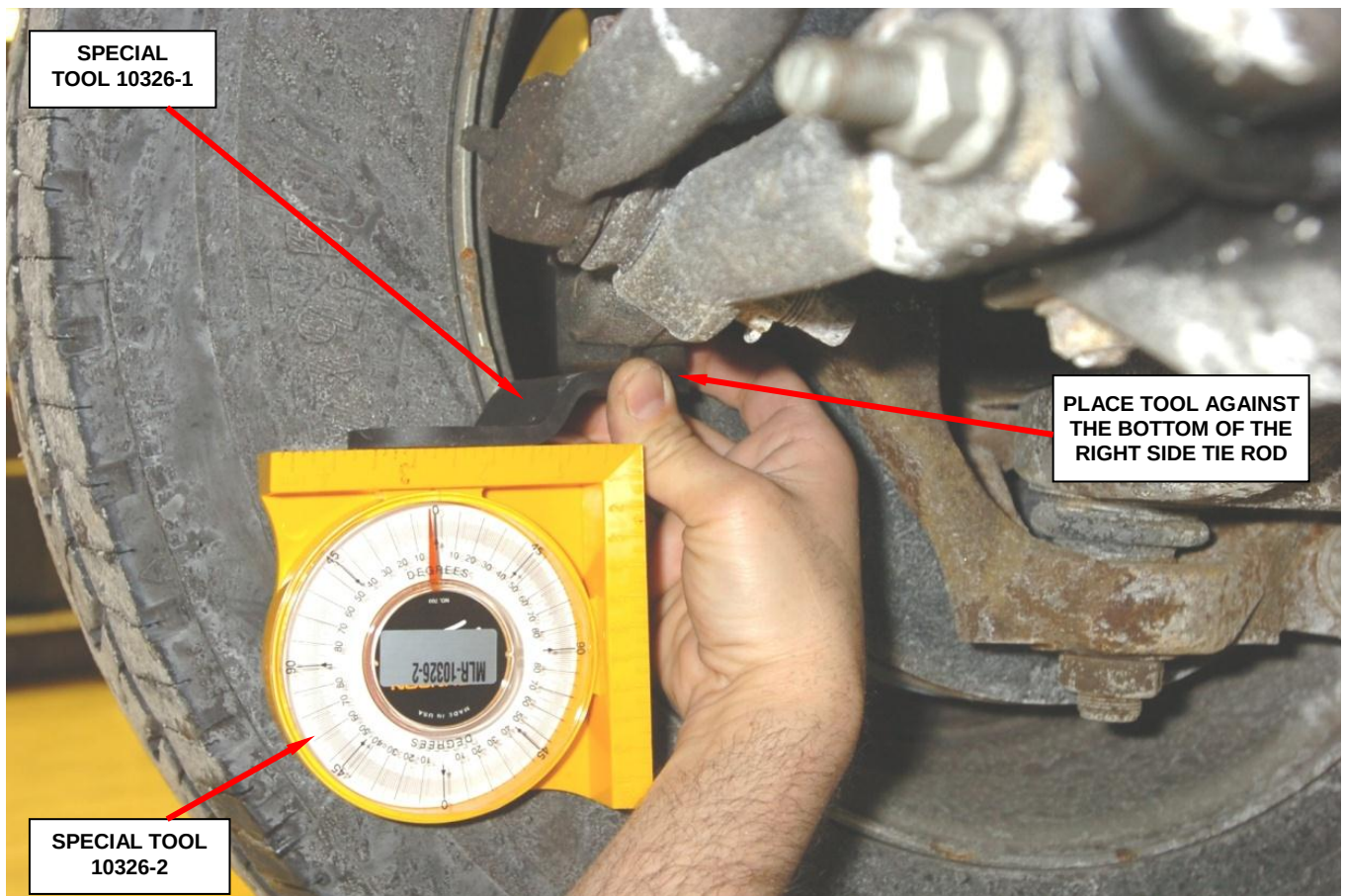
17. Set the toe-in and center the steering wheel following the alignment rack manufacturer's instructions.

NOTE: Toe should be set to +0.20° total toe on all models.

18. The vehicle must meet the following criteria before measuring the tie rod angles:
 - Vehicle on level surface.
 - Full vehicle weight on the tires.
 - Bottom side of both tie rods must be clean.
 - Bottom side of both tie rods must not have burrs.

Service Procedure (Continued)

19. Install Special Tool 10326-1 and 10326-2 onto the bottom surface of the right side tie rod as shown in Figure 9.
20. Measure the angle of the right side tie rod. Record the number displayed on the inclinometer gauge.

**Figure 9 – Measure Right Side Tie Rod Angle**

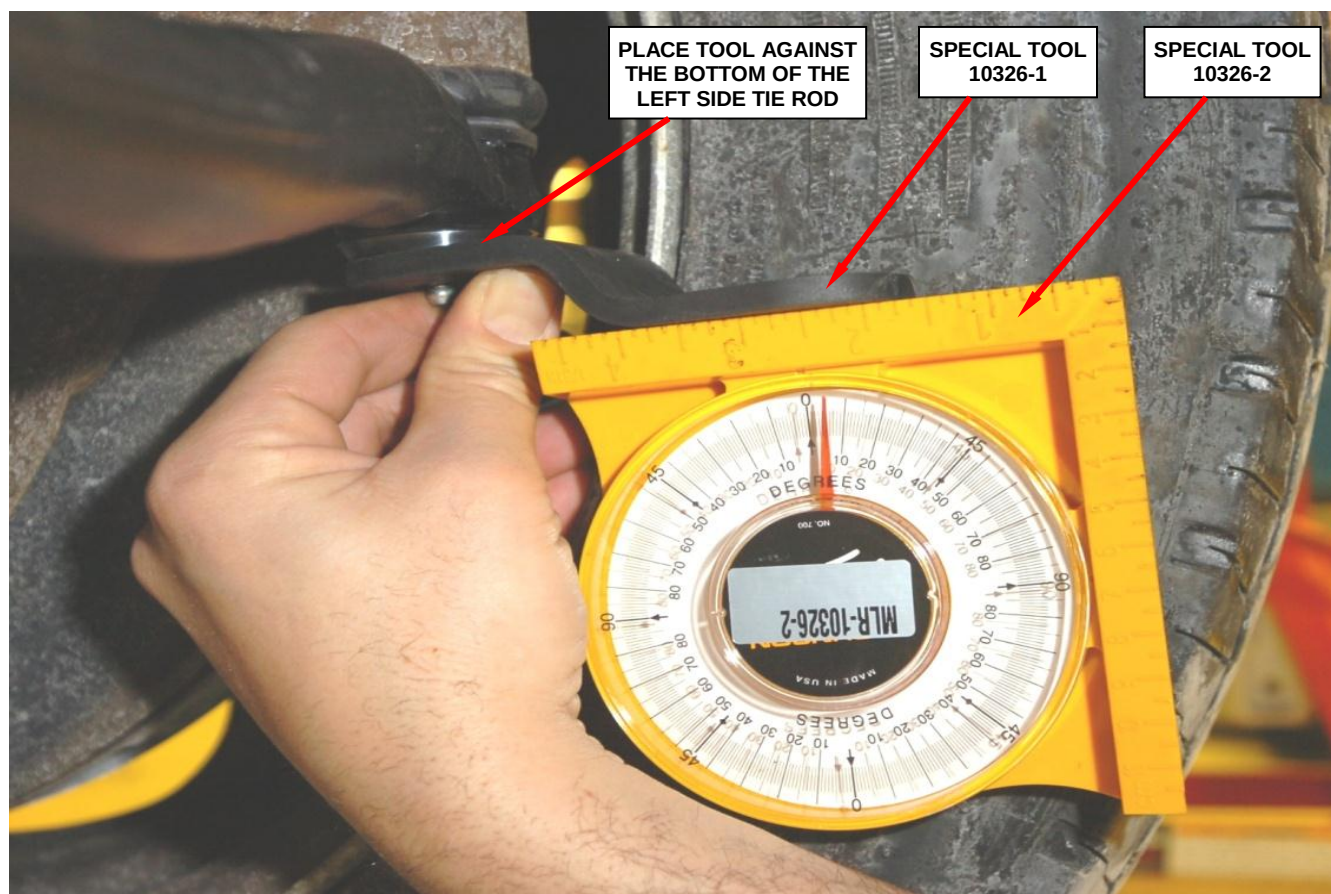
Service Procedure (Continued)

Figure 10 – Adjust the Left Tie Rod Angle to Match Right Tie Rod Angle

21. Install Special Tool 10326-1 and 10326-2 onto the bottom surface of the left side tie rod as shown in Figure 10.
22. Adjust the left tie rod so that the same angle appears on the inclinometer gauge as was measured on the right tie rod.

NOTE: The objective is to have both tie rods at the same angle.

23. Tighten tie rod adjuster clamps to 40 ft. lbs. (54 N·m).
24. Recheck both right and left tie rod angles. The right and left tie rod angles must be the same. If the tie rod angles are different, loosen the left tie rod adjuster clamp and adjust left tie rod as required.

WARNING: Failure to have the same right and left tie rod angles will cause the condition this recall is addressing to still be present.

25. Continue with **Section D. Tighten Front Track Bar Bolt.**

Service Procedure (Continued)**D. Tighten Front Track Bar Bolt**

1. Turn the steering wheel to the full right position.
2. Tighten the track bar bolt at the axle (see chart below for tightening specification).

NOTE: The vehicle must be on a level surface with full weight on the wheels before tightening the track bolt (Figure 11).

Socket Size	Ft. Lbs.	N·m
18 mm	170	230
21mm	221	300

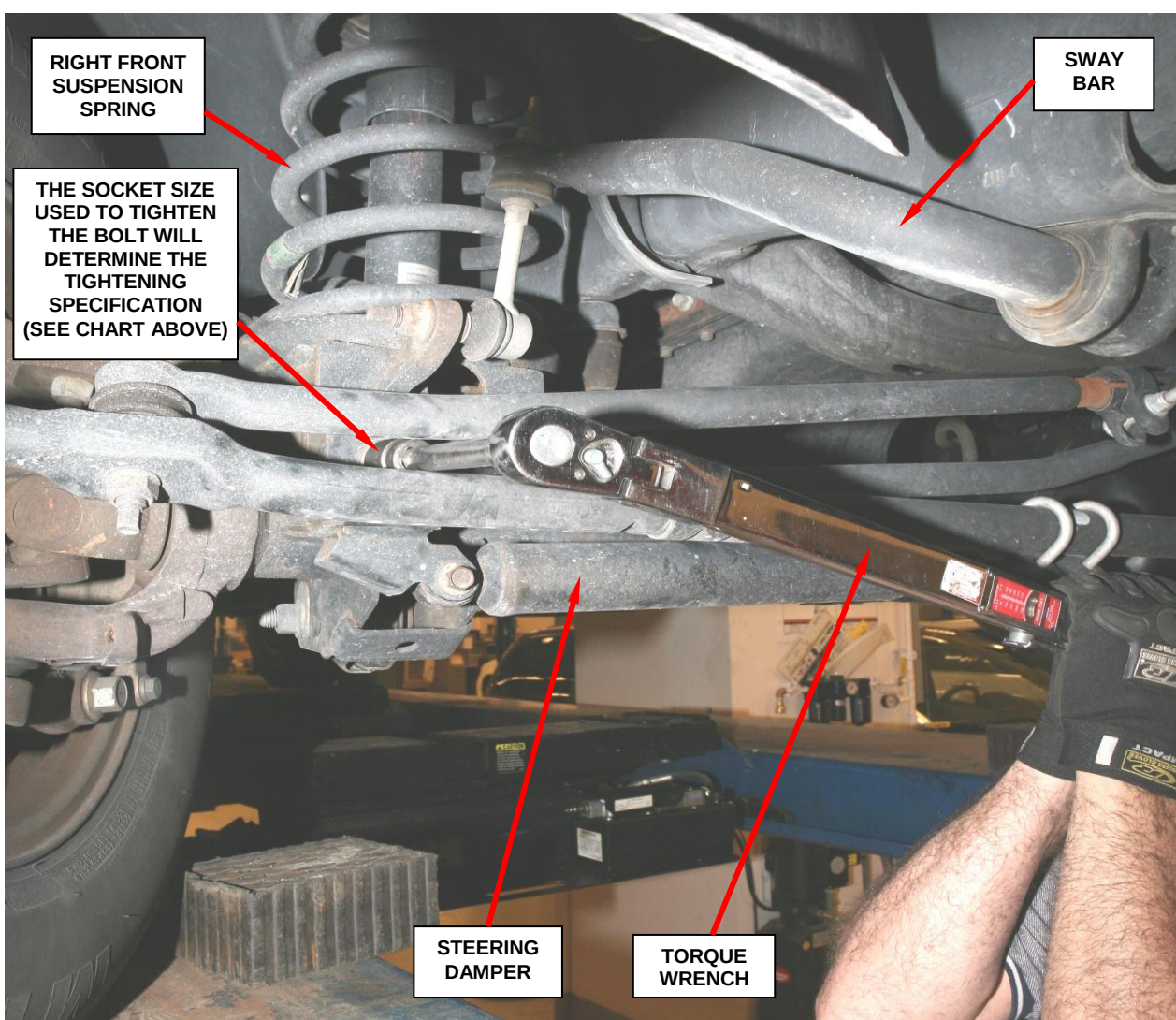


Figure 11 – Tighten Track Bar Bolt at Axle

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:

	<u>Labor Operation Number</u>	<u>Time Allowance</u>
Inspect steering linkage type, inspect tie rod angles and tighten track bar bolt	02-L1-61-82	0.3 hours
Inspect steering linkage type, inspect tie rod angles, replace left tie rod, set toe angle and tighten track bar bolt	02-L1-61-83	1.3 hours
Inspect steering linkage type and tighten track bar bolt	02-L1-61-84	0.2 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

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

Owner Notification and Service Scheduling

All involved vehicle owners should be notified of the service requirement by their Distributor/Dealer. Owners are requested to schedule appointments for this service. A sample copy of the owner notification letter is attached.

Vehicle Lists, Global Recall System, VIP and Distributor/Dealer Follow up

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

GRS provides involved Distributors/Dealers with an updated VIN list of their incomplete vehicles. Completed vehicles are removed from GRS within several days of repair claim submission.

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

Additional Information

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

Global Service and Parts - International
Chrysler Group LLC



SAFETY RECALL L16

LEFT TIE ROD

Dear Ram Truck Owner:

Chrysler has decided that a defect, which relates to motor vehicle safety, exists in some **2008 through 2011 model year Ram Trucks**. Also involved are **2003 through 2008 Ram Trucks that had the steering linkage replaced with Mopar service parts**.

The problem is... **The left tie rod ball stud on your truck (VIN: xxxxxxxxxxxxxxxxxxxx) may fracture under certain driving conditions. This could cause a loss of directional control and/or a crash without warning. Also, the front axle track bar bolt torque must be checked and tightened if required.**

What your dealer will do... **Chrysler will repair your vehicle free of charge (parts and labor).** To do this, your distributor/dealer will tighten the front axle track bar bolt, inspect the left tie rod end and replace it if required. The work will take about ½ hour to inspect and an additional hour if the tie rod requires replacement. However, additional time may be necessary depending on service schedules.

What you must do to ensure your safety... Simply **contact your distributor/dealer** right away to schedule a service appointment. Ask the distributor/dealer to hold the parts for your vehicle or to order them before your appointment. **Please bring this letter with you to your distributor/dealer.**

If you need help... If you have trouble getting your vehicle serviced, please contact the Chrysler **Distributor/Dealer** nearest your location. A representative will assist you in getting your vehicle serviced. This information can be found in the Customer Assistance section of your Owner's Manual.

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

Global Service & Parts - International
Chrysler Group LLC
Notification Code L16