



Revision II July 2016

Dealer Service Instructions for:

Safety Recall R46 / NHTSA 15V-541 Front Suspension Track Bar Frame Bracket

NOTE: The Riv-Nut crimping and bracket installation processes have been revised.

Track bar reinforcement brackets are presently not available for 4x2 trucks. Reinforcement brackets for the 4x2 trucks will be available in the third quarter of 2016. A revised version of this recall document will be released when 4x2 reinforcement bracket packages become available. Inspection is still required.

Models

2013 – 2014 (D2) RAM Truck (3500 series)

2014 (DD) RAM Cab Chassis (3500 series)

(DJ) RAM Truck (2500 series)

NOTE: This recall applies only to the above vehicles built from October 09, 2012 through July 29, 2014 (MDH 100906 through 072923).

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

The front suspension track bar frame bracket on about 149,500 of the above vehicles may have been improperly welded to the frame rail during the manufacturing process. The front suspension track bar frame bracket welds may break and allow the front suspension track bar frame bracket to separate from the frame rail. A separated front suspension track bar frame bracket will cause diminished steering response and could cause a crash without warning.

Repair

The front suspension track bar frame bracket welds must be inspected. Vehicles found with cracked and/or separated welds must have the track bar frame brackets reviewed to determine if they should be repaired, replaced or no action is required before reinforcement package is installed.

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that front suspension track bar frame bracket replacement is required and the vehicle must be held overnight.

Parts Information

| Part Number <u>D</u> | <u>Description</u> |
|----------------------|--|
| | Track Bar Bracket Reinforcement Package (4x4 only) |

Each package contains the following components:

| Quantity | Description |
|----------|---|
| 1 | Bracket, Front Reinforcement |
| 1 | Bracket, Rear Reinforcement |
| 1 | Bolt, (M18 x 90) |
| 1 | Nut (M18) |
| 1 | Nut, Flag (M10) |
| 4 | Riv-Nut (M10 / 1.5) |
| 5 | Screw, Internal Torx Head Cap (M10 / 1.5) |
| 1 | Screw, Flange Hex Head (M14 / 1.5) |
| 1 | Nut, Free Running Hex |
| 1 | Washer, Flat (M10) |
| 1 | Clip, Plastic |
| 1 | Wire, Bolt Fish (M14 x 22" long) |

Each dealer to whom vehicles in the recall were assigned will receive enough Track Bar Bracket Reinforcement Packages to service about 20% of those vehicles.

REMINDER: Be sure to order one bracket installation package for each repair.

Parts Information (Continued)

<u>Part Number</u> <u>Description</u>

CBNKR464AA Track Bar Reinforcement Bracket Installation Kit

NOTE: Order one kit for each repair.

SPECIAL NOTE: The three transfer punches included in CBNKR464AA kit are incorrect and they should be discarded. The replacement transfer punches in CBNKR465AA kit are correct and should be used for all involved vehicle repairs.

Each package contains the following components:

| Quantity | <u>Description</u> |
|-----------------|--------------------|
| 1 | Bit, Drill 1/8" |
| 1 | Bit. Drill 3/16" |
| 1 | Bit, Drill 1/4" |
| 1 | Bit, Drill 7/16" |
| 1 | Bit, Drill 17/32" |
| 1 | Bit, Drill 5/8" |

Part Number Description

CBNKR465AA Transfer Punch Kit (green paint dot on the transfer punch

shank indicates it is a good transfer punch)

NOTE: One set of transfer punches can mark 50 vehicles.

Each package contains the following components:

| Quantity | <u>Description</u> |
|-----------------|--------------------------|
| 1 | Punch, Transfer (11 mm) |
| 1 | Punch, Transfer (15 mm) |
| 1 | Punch, Transfer (15/32") |



Parts Information (Continued)

| Part Number | <u>Description</u> |
|-------------|---|
| 04318031 | Adhesive, Mopar Lock & Seal (MS-CC75) |
| | NOTE: One tube of adhesive can repair 10 vehicles. |
| 04443633 | Primer, Spray (MS.90082) |
| | NOTE: One can of spray primer will repair 8 vehicles. |
| 04443609 | Paint, Black Spray (MS-PF-1-25) |
| | NOTE: One can of spray paint will repair 8 vehicles. |
| 06508295AA | Bolt, M10 Installation |
| | NOTE: This bolt is used to make an installation tool. |

NOTE: Track bar reinforcement brackets are presently not available for 4x2 trucks. If there are no cracked weld(s), fractured weld(s) and/or the bracket separation from the left frame rail, no further action is required at this time.

Track Bar Bracket Reinforcement Packages for the 4x2 trucks will be available in the third quarter of 2016. A revised version of this recall document will be released when 4x2 reinforcement bracket packages become available.

Parts Return

No parts return required for this campaign.

Special Tools

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

➤ C3894-A

Puller, Drag Link

Service Procedure

A. Inspect Front Suspension Track Bar Frame Bracket

- 1. <u>If the vehicle is a Power Wagon model</u>, no inspection or repair is required. Return the vehicle to the customer.
- 2. Raise the truck on an appropriate hoist
- 3. Clean the track bar frame bracket area with brake cleaner or equivalent.
- 4. Inspect <u>all</u> track bar frame bracket welds for cracks, fractures and/or track bar bracket separation from the left frame rail (Figure 1, 2, 3, and 4).
- ➤ If the vehicle's front suspension has been modified with aftermarket suspension components that alter the track bar bracket, so as to prevent installation of the Front Suspension Track Bar Reinforcement Brackets, the recall cannot be completed. Return the vehicle to the customer and inform the customer that the recall remedy was not completed and explain the reason why.

NOTE: Only if the vehicle is returned to the original build configuration can the owner have the recall performed. The vehicle owner is responsible for the cost to return the vehicle to the original build configuration.

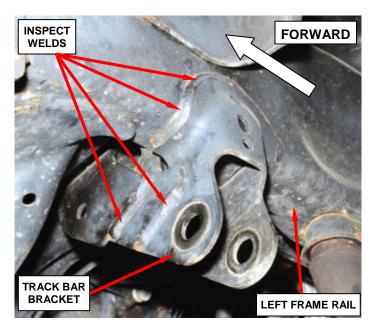
- For 4x4 trucks, if there are no cracked weld(s), fractured weld(s) and/or the bracket separation from the left frame rail, continue with Section B. Front Suspension Track Bar Reinforcement Bracket Installation.
- For 4x2 trucks, track bar reinforcement brackets are presently not available. If there are no cracked weld(s), fractured weld(s) and/or the bracket separation from the left frame rail, no further action is required at this time. Return the vehicle to the customer.
- For 4x2 and 4x4 trucks, if the front suspension track bar bracket is found to have cracked weld(s), fractured welds and/or the bracket is separated from the frame, use the following procedure:
 - a. Using a digital camera, photograph the track bar bracket and the surrounding area. Images should at minimum, mirror the three images shown in Figure 1. Make sure all the pictures are clear and in focus.

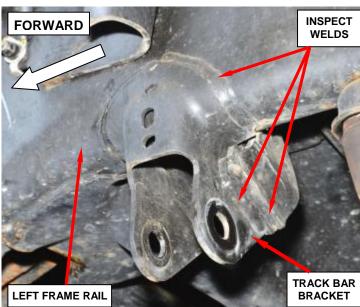
NOTE: All photographs submitted must be in .jpg format.

b. Have the vehicle information available (VIN / Mileage / Owner Information)

- c. Enter the DealerCONNECT system to initiate a Service Technical Assistance Resource (STAR) case.
- d. Select the "Service" tab.
- e. Select "TechCONNECT" in the "Repair Information" box.
- f. Enter the Vehicle Identification Number (VIN) and click the blue "Submit" button.
- g. Click the "Request Technical Assistance" box.
- h. Follow the screen prompts to start a STAR case.
- i. FCA will review the case and determine which of the following actions will be required:
 - Schedule a weld team to repair the welds.
 - Schedule a weld team to replace the bracket.
 - ➤ No action required, install reinforcement kit.

CAUTION: <u>Do not remove the front axle assembly until request has been reviewed and a weld team has been scheduled to perform the repair or replacement</u>. Continue with Section D. Remove Front Axle for Welding Access just prior to the scheduled date and time the weld team is to arrive at your dealership.





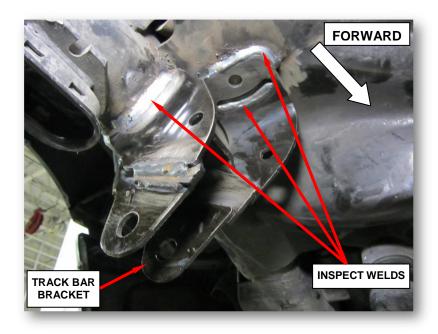


Figure 1 – Suspect Weld Locations on Front and Back Side of Track Bar Bracket (Track Bar Removed for Photographic Purposes Only)

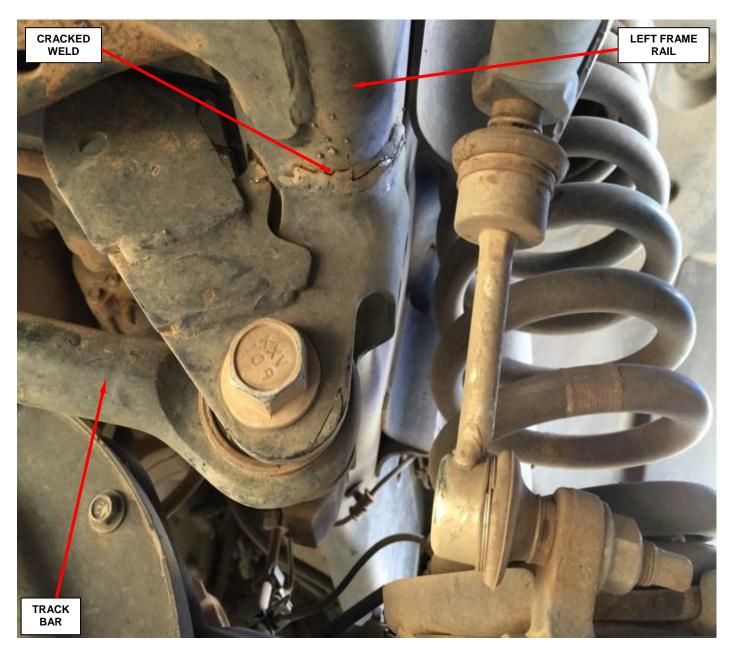


Figure 2 – Example of a Cracked Track Bar Bracket Weld

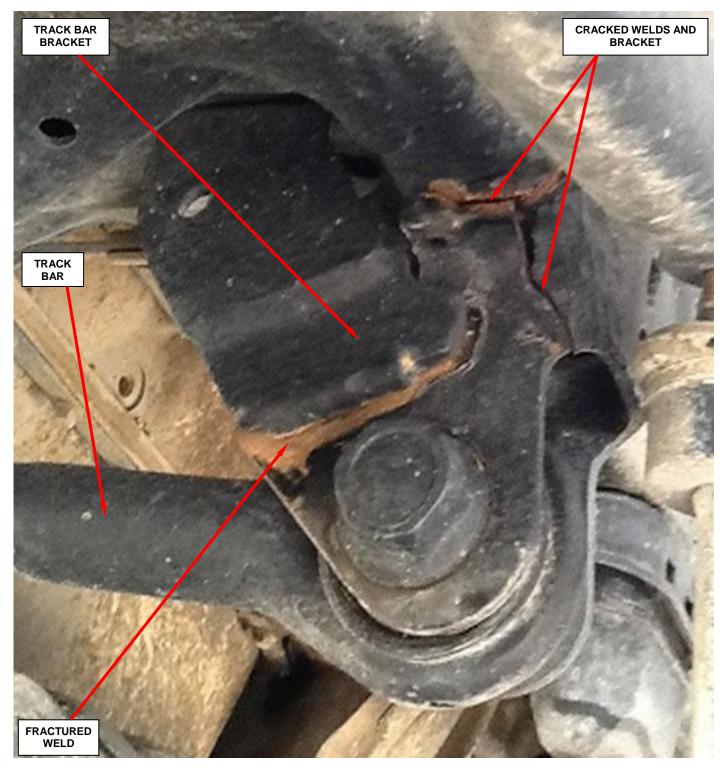


Figure 3 – Example of a Fractured Weld at Track Bar Bracket

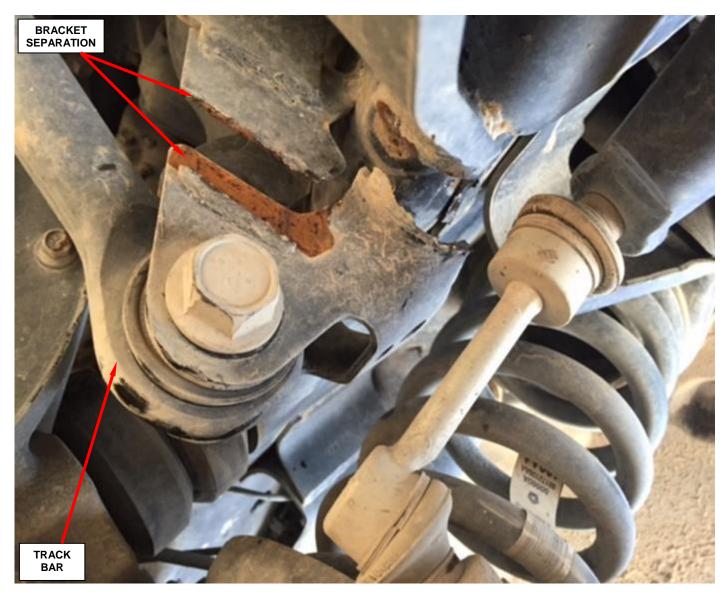


Figure 4 – Example of Track Bar Bracket Separated from the Left Frame Rail

B. 4x4 Front Suspension Track Bar Reinforcement Bracket Installation

CAUTION: It is critical that these repair instructions are performed exactly as written. <u>Do not perform steps out of order</u>. The holes drilled in the frame will be out of location if these instructions are not followed as written.

- 1. Carefully disconnect the vent hose at the front axle (Figure 5).
- 2. Turn the front wheels to the full "right turn" position to gain additional clearance from the pitman arm (Figure 6).

NOTE: Removing the front axle vent will give added access to the work area.

3. Remove and save the track bar bolt and flag nut from the track bar at the frame bracket (Figure 6).

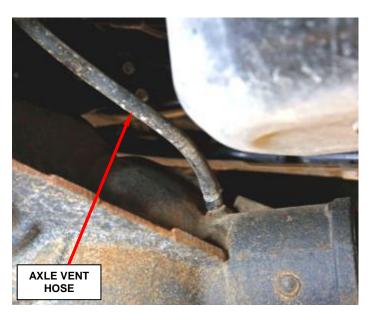


Figure 5 – Front Axle Vent Hose

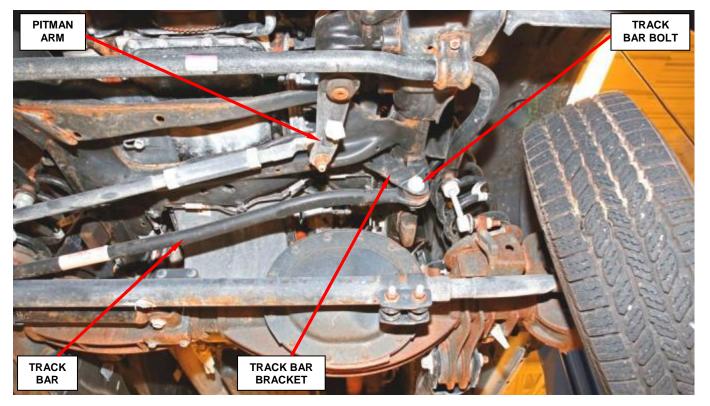


Figure 6 – Turn Front Wheels full Right and Remove Track Bar Bolt

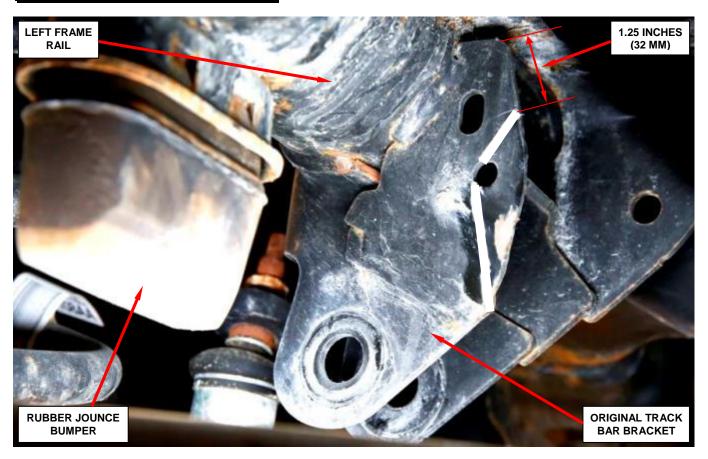


Figure 7 – Mark Frame and Cut Bracket with a Cut-Off Wheel

- 4. Use the following procedure to modify the existing frame bracket:
 - a. Mark the frame bracket shown in Figure 7.
 - b. Carefully disconnect the brake tube from the two original plastic routing clips (Figure 8).
 - c. Relocate the brake tube to gain clearance for the cut-off wheel.

CAUTION: Use extreme care not to allow the cut-off wheel to come in contact with the brake tube.

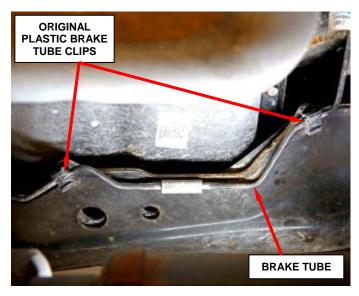


Figure 8 – Brake Tube Plastic Clips

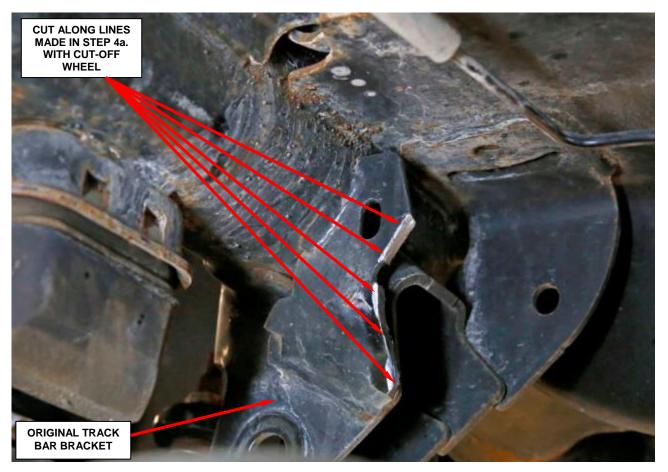


Figure 9 – Correctly Cut Track Bar Bracket

d. Using a cut-off wheel, cut the frame bracket along the lines made in Step 4a.

e. Using a small grinder, remove any burs from the cut edge of the frame bracket.

5. Using the original track bar bolt and flag nut, temporarily place the new reinforcement brackets onto the frame rail bracket (Figure 10). Tighten the original track bar bolt just enough to hold the new reinforcement brackets in place.

CAUTION: Be sure to push the reinforcement brackets tight against the frame before snugging the track bar bolt.

6. Using the supplied transfer punches, center punch the two hole locations shown in Figure 10, using the new reinforcement brackets as a template.

NOTE: The transfer punches that come in installation kit CBNKR464AA have the incorrect transfer punches and should not be used for this repair. Use the transfer punches from kit CBNKR465AA.

7. Carefully remove the reinforcement brackets.

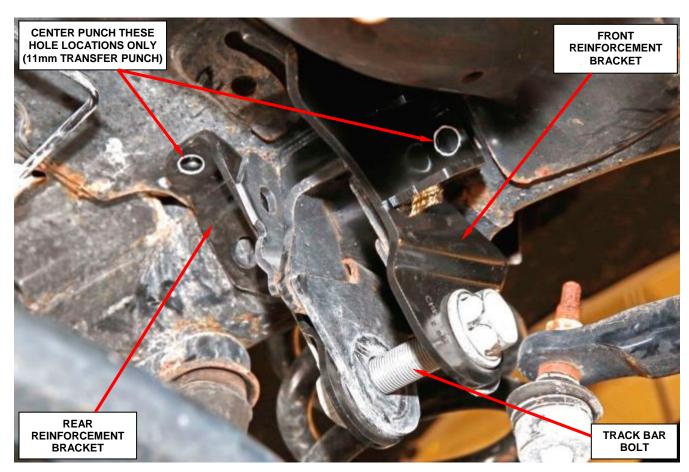


Figure 10 - Temporarily Install Track Bar Reinforcement Brackets

- 8. Using the supplied drill bit, drill a 1/8" diameter pilot hole at the two center punch marks made in Step 6 of this procedure.
- 9. Using the supplied drill bit, enlarge the two pilot holes drilled in Step 8 of this procedure to 3/16" diameter.
- 10. Using the supplied drill bit, enlarge the two holes drilled in Step 9 of this procedure to 7/16" diameter.
- 11. Using the supplied drill bit, enlarge the two holes in the frame to 17/32" diameter. Do not allow the drill to wobble while drilling. An oversized hole will result.
- 12. Remove all burs from the two holes drilled in the frame so that the head of the riv-nut will sit flat against the frame surface.
- 13. Apply one coat each of primer and top coat paint to the two hole openings drilled and along the cuts made in Step 4.
- 14. Using a small hammer, tap a riv-nut into each of the 17/32" diameter holes (Figure 11).

CAUTION: Make sure the riv-nut shoulder is flush against the frame surface.

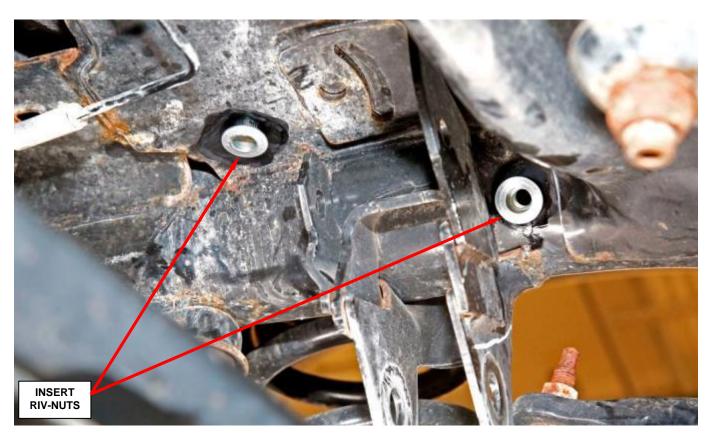


Figure 11 – Install Two Riv-Nuts

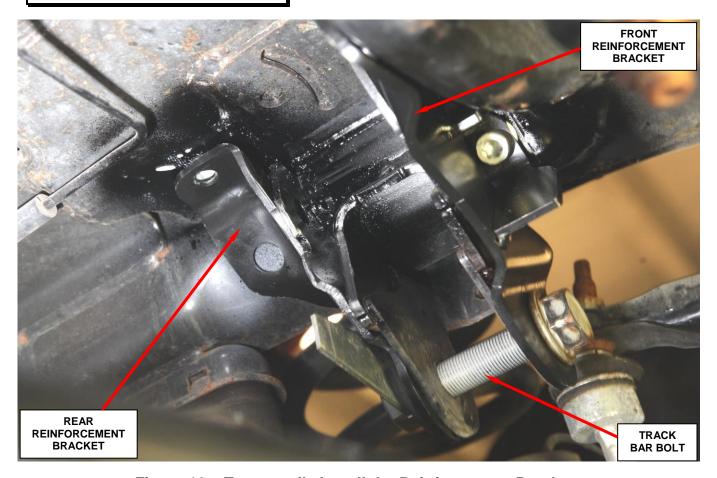


Figure 12 - Temporarily Install the Reinforcement Brackets

- 15. Install the reinforcement brackets into the position (Figure 12). Install the original track bar bolt finger tight.
- 16. Rotate the front reinforcement bracket up into position, until it makes contact with the newly installed riv-nut. If a gap occurs between the reinforcement bracket and the riv nut head then install the M10 flat washer between the reinforcement bracket and the riv-nut head (Figure 13).

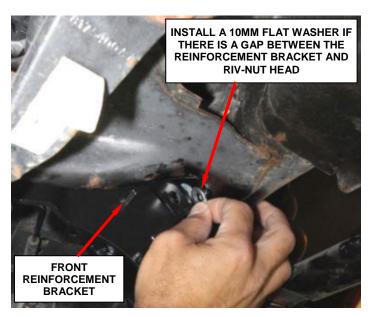
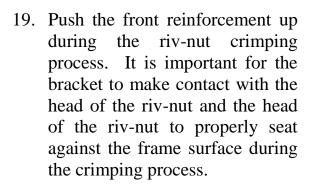


Figure 13 – 10mm Flat Washer Location

- 17. Fabricate an installation bolt from an M10 1.5 x 25mm bolt (P/N 06508295AA) by removing the blue thread locking compound from the bolt threads (Figure 14).
- 18. Install the M10 installation bolt into the front reinforcement bracket riv-nut hole finger tight.

NOTE: If poor alignment occurs between the newly located M10 riv-nut and the front reinforcement bracket M₁₀ holt and hole the installation bolt cannot installed, refer to Section C. -**Bracket Hole Alignment.**



20. Tighten the M10 installation bolt on the riv-nut to 27 ft. lbs. (37 N·m) to crimp the riv-nut (Figure 15).

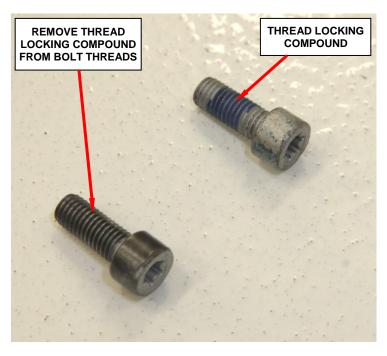


Figure 14 – M10 Installation Tool

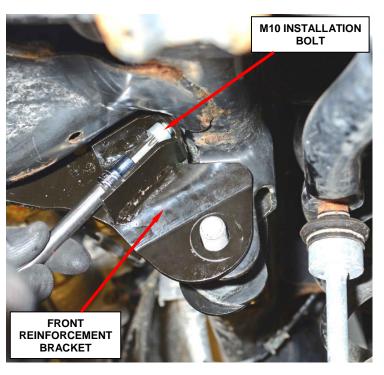


Figure 15 – Crimp Riv-Nut with M10 Installation
Bolt

21. Using the proper size transfer punch, center punch the remaining three holes (two on the frame and one on the front reinforcement bracket) for the front reinforcement bracket (Figure 16).

NOTE: The transfer punches that come in installation kit CBNKR464AA have the incorrect transfer punches and should not be used for this repair. Use the transfer punches in kit CBNKR465AA.

22. Remove and save the M10 installation bolt from the front reinforcement bracket.

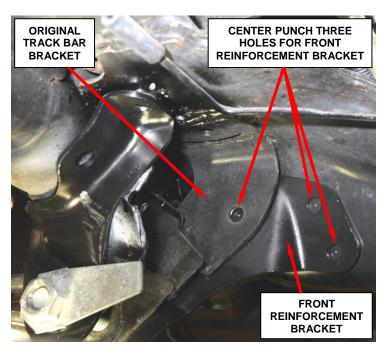


Figure 16 – Rear Reinforcement Bracket

- 23. Rotate the rear reinforcement bracket up into position, until it makes contact with the newly installed riv-nut (Figure 17).
- 24. If a gap occurs between the rear reinforcement bracket and the riv nut head then install the M10 flat washer between the reinforcement bracket and the riv-nut head (Figure 17).
- 25. Install the M10 installation bolt into rear reinforcement bracket riv-nut hole finger tight.

NOTE: If poor alignment occurs between the newly located M10 riv-nut and the rear reinforcement bracket hole and the M10 installation bolt cannot be installed, refer to Section C. – Reinforcement Bracket Hole Alignment.

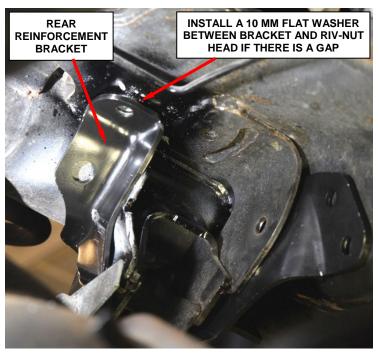


Figure 17 – 10mm Flat Washer

- 26. Push the rear reinforcement up during the riv-nut crimping process. It is important for the bracket to make contact with the head of the riv-nut and the head of the riv-nut to properly seat against the frame surface during the crimping process.
- 27. Tighten the M10 installation bolt on the riv-nut to 27 ft. lbs. (37 N⋅m) to crimp the riv-nut.

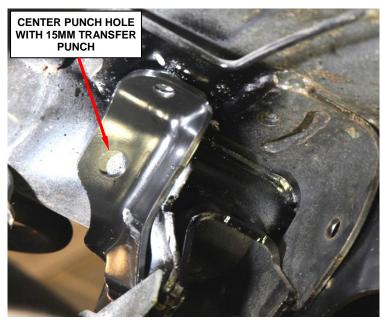


Figure 18 - Center Punch hole with 15mm Punch

28. Mark the remaining rear bracket hole with the supplied 15 mm transfer punch (Figure 18).

NOTE: The transfer punches that come in installation kit CBNKR464AA have the incorrect transfer punches and should not be used for this repair. Use the transfer punches from kit CBNKR465AA.

- 29. Remove and save the M10 installation bolt from the rear reinforcement bracket.
- 30. Remove and save the reinforcement brackets.

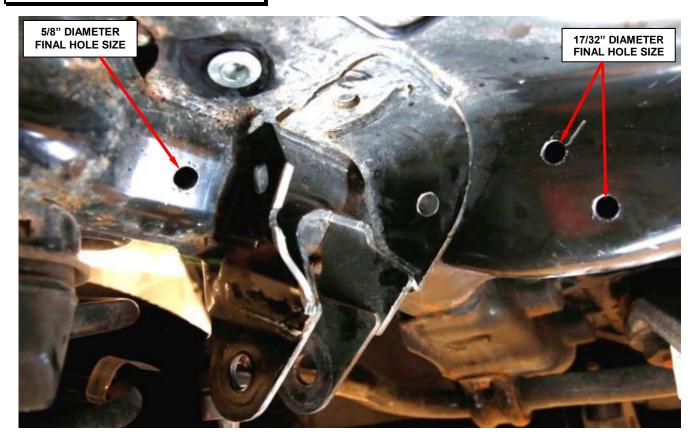


Figure 19 – Drill Three Holes in Frame at Center Punch Marks

- 31. Using the supplied drill bit, drill a 1/8" diameter pilot hole at all center punch marks made (three holes on the frame and one on the front reinforcement bracket) (Figure 19 and 20).
- 32. Using the supplied drill bit, enlarge all holes drilled in Step 31 of this procedure to 3/16" diameter (three holes on the frame and one on the front reinforcement bracket).
- 33. Using the supplied drill bit, enlarge all holes drilled in Step 32 of this procedure to 7/16" diameter (three holes on the frame and one on the front reinforcement bracket).

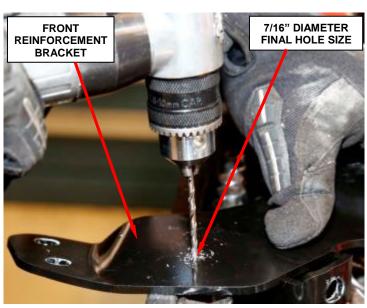


Figure 20 – Drill One Hole In Front Reinforcement Bracket to 7/16"

34. Using the supplied drill bit, enlarge the three holes on the frame drilled in Step 33 of this procedure to 17/32" (three frame holes only).

CAUTION: Do not wobble the drill to enlarge or oversize the hole.

35. Enlarge the one hole in the frame rail shown in Figure 19 to from 17/32" to 5/8".

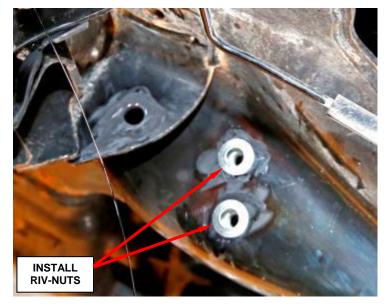


Figure 21 - Install Riv-Nuts into 17/32" Holes

- 36. Remove all burs from remaining holes to ensure that the head of the riv nut sits flush against the frame surface (Figure 21).
- 37. Apply one coat each of primer and top coat paint to all hole openings drilled and any bare metal edges.
- 38. Using a small hammer, tap a riv-nut into each of the 17/32" holes (Figure 16).

CAUTION: Make sure the riv-nut shoulder is flush against the frame surface.

39. Screw the 14 mm nut onto the 14 mm bolt two or three times to clear any burs from the bolt threads.

NOTE: Run the 14 mm nut up and down the bolt will make installing the bolt easier.

40. Screw the 14 mm bolt into the "bolt fish tape" tool supplied with the kit (Figure 22).

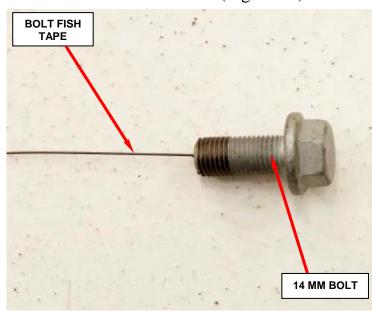


Figure 22 – "Bolt Fish Tape" Tool

- 41. Using a piece of mechanic's wire and starting at the 5/8" diameter frame hole, insert the mechanic's wire and feed it through the frame until it comes out the existing hole in the outside face of the left frame rail (Figure 23).
- 42. Connect the mechanic's wire end to the "bolt fish tape" end at the outside face of the left frame rail (Figure 23).
- 43. Carefully pull the mechanic's wire out of the 5/8" hole until the "bolt fish tape" is pulled through the 5/8" frame hole.

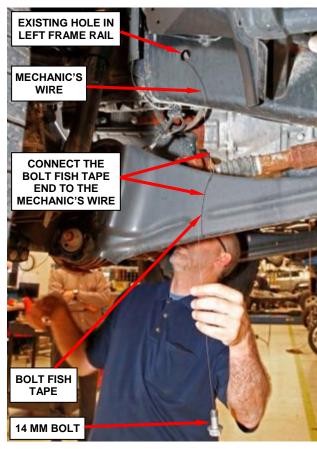


Figure 23 - Install 14 MM Bolt

- 44. Disconnect the mechanic's wire from the "bolt fish tape" end.
- 45. Carefully pull the "bolt fish tape" until the 14 mm bolt is seated in the 5/8" frame hole (Figure 24).

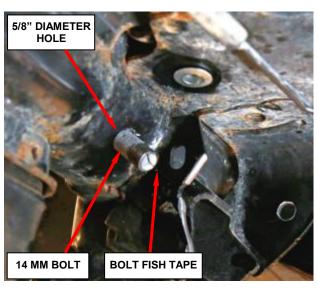


Figure 24 – 14 MM Bolt in 5/8" Diameter Hole Location

- 46. Remove and save the left side rubber jounce bumper (Figure 25).
- 47. Thread the fish tape through the corresponding hole in the rear reinforcement bracket and place the bracket into position.
- 48. Install the one M10 bolt for the rear reinforcement bracket finger tight (snug) (Figure 26).
- 49. Carefully remove the "bolt fish tape" tool from the 14 mm bolt and install the 14 mm nut finger tight (snug) (Figure 26).

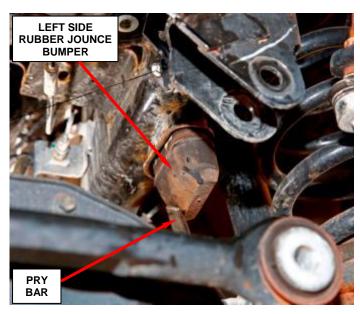


Figure 25 – Remove Left Rubber Jounce Bumper

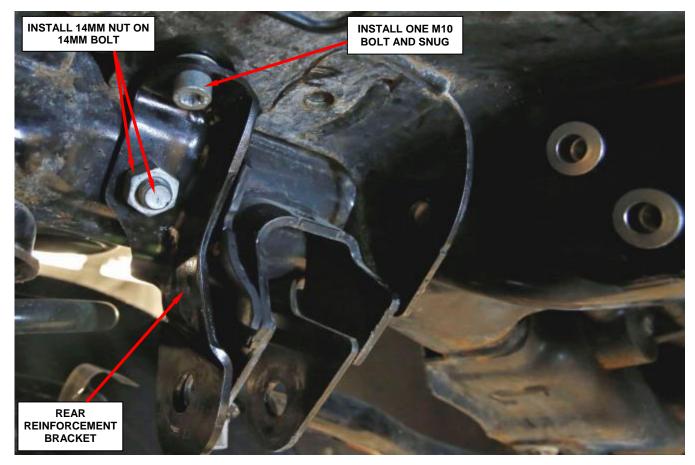


Figure 26 - Install One M10 Bolt and 14 mm Nut for Rear Reinforcement Bracket

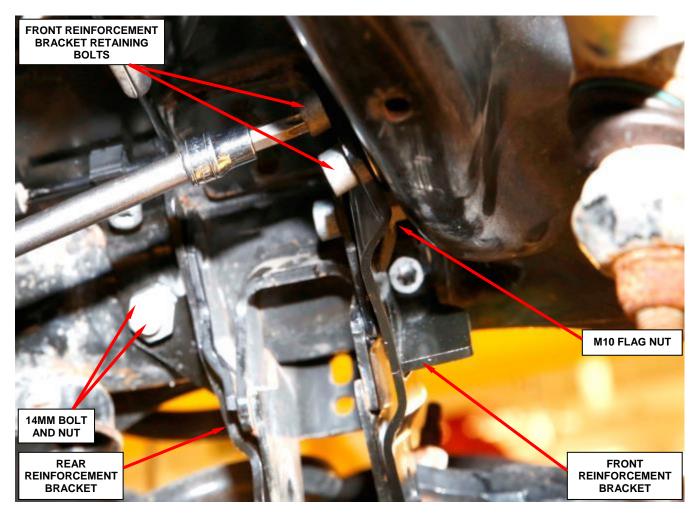


Figure 27 - M10 Bolts

- 50. Place the front reinforcement bracket into position and install the original track bar bolt loosely.
- 51. <u>Using the M10 installation bolt</u>, install the M10 installation bolt into one of the two riv-nut holes finger tight (Figure 27).
- 52. Push the reinforcement bracket against the riv-nut head and tighten the M10 installation bolt to 27 ft. lbs. (37 N·m) to crimp the riv-nut.
 - CAUTION: It is important for the reinforcement bracket to make contact with the head of the riv-nut during the crimping process to ensure that the riv-nut seats against the frame surface.

53. Remove and save the M10 installation bolt.

| 54. | Install an M10 bolt with the blue thread locking patch finger tight into the hole that the M10 installation was removed from in Step 53. |
|-----|--|

- 55. <u>Using the M10 installation bolt</u>, install the M10 installation bolt into the other riv-nut hole finger tight.
- 56. Push the reinforcement bracket against the riv-nut head and tighten the M10 installation bolt to 27 ft. lbs. (37 N⋅m) to crimp the second riv-nut.

CAUTION: It is important for the reinforcement bracket to make contact with the head of the riv-nut during the crimping process to ensure that the riv-nut seats against the frame surface.

- 57. Remove and save the M10 installation bolt.
- 58. Install an M10 bolt with the blue thread locking patch finger tight into the hole that the M10 installation was removed from in Step 57.
- 59. Install a M10 bolt with the blue thread locking patch (and flat washer if required) into the remaining riv-nut hole on the front bracket.
- 60. Remove and discard the original track bar bolt.

61. Place the track bar into position and install the new track bar bolt. The bolt must enter from the rear of the vehicle and point forward, with the track bar bolt nut on the front side (Figure 23).

CAUTION: If the track bar bolt is installed facing rearward, the suspension will hit the track bar bolt during suspension travel. Install the bolt through the rear reinforcement bracket first, with the nut going against the front reinforcement bracket (Figure 28).

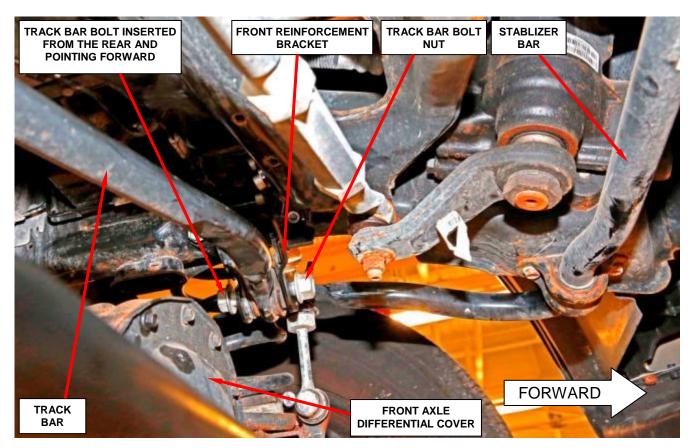


Figure 28 - Install Track Bar Bolt in Orientation Shown



Figure 29 – Tighten Track Bar Bolt to 285 ft. lbs. (387 N·m)

62. With full vehicle weight on the suspension, tighten the track bar bolt to 285 ft. lbs. (387 N·m) (Figure 29).

63. Carefully loosen the M14 nut and apply three drops of thread locker to the bolt threads.

64. Tighten the 14 mm nut on the rear reinforcement bracket to 110 ft. lbs. (150 N⋅m) (Figure 30).

65. Tighten all of the remaining reinforcement bracket M10 cap screws to 27 ft. lbs. (37 N⋅m) (Figure 30).

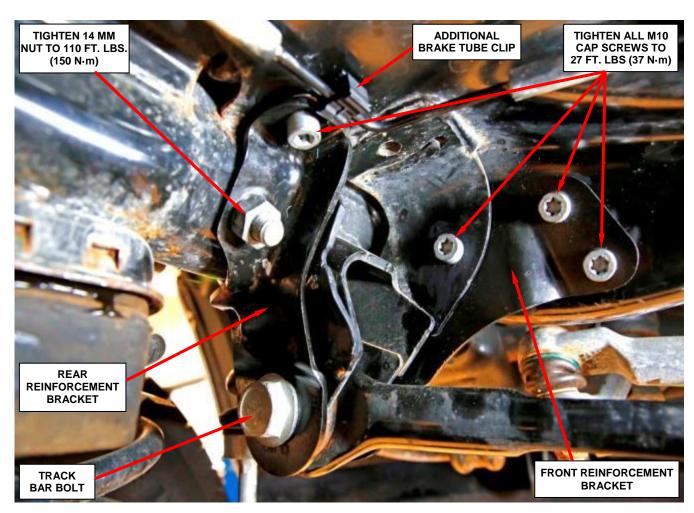


Figure 30 - Correctly Installed Reinforcement Brackets

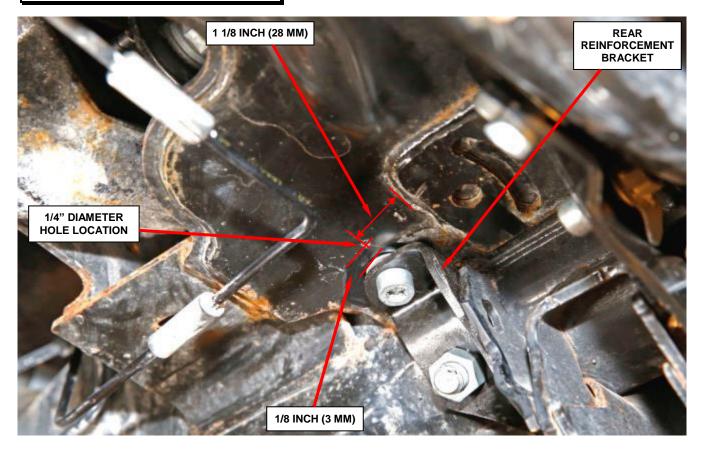


Figure 31 – 1/4 Inch Diameter Hole Location for Brake Tube Clip

- 66. Use the following procedure to install an additional brake tube routing clip:
 - a. Measure and center punch the location shown in Figure 31.
 - b. Drill a 1/8" diameter pilot hole at the center punch mark.
 - c. Enlarge the 1/8" diameter hole to 1/4" diameter.
 - d. Remove any burs from the 1/4" diameter hole.
 - e. Apply one coat each of primer and top coat paint to the edge of the 1/4" diameter hole.
 - f. Insert the brake tube routing clip barbed peg into the 1/4" diameter hole.
 - g. Snap brake tube into the new brake tube routing clip.
 - h. Snap the brake tube into the other two original brake tube routing clips.
 - i. Adjust the brake tube as required to ensure that the brake tube is routed away from other components.

- 67. Coat the jounce bumper frame cup and rubber jounce bumper with Mopar zipper lube or equivalent.
- 68. Install the left rubber jounce bumper into the receiver cup on the left frame rail.
- 69. Install the axle vent hose to the axle vent hose fitting.
- 70. Lower the vehicle from the hoist
- 71. Road test the vehicle and verify that the steering wheel is centered:
 - ➤ If the steering wheel is centered, no further action is required. Return the vehicle to the customer.
 - > If the steering wheel is off center, continue with Step 72 of this procedure.
- 72. Setup the vehicle on an appropriate alignment rack.
- 73. Loosen the drag link adjuster jam nuts on the drag link and adjust the drag link length as required (Figure 32).
- 74. Tighten the drag link jam nuts to 109 ft. lbs. (148 $N \cdot m$).
- 75. Return the vehicle to the customer.

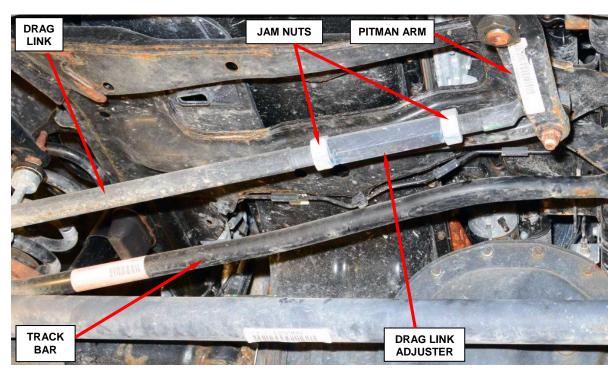


Figure 32 - Drag Link Adjuster and Jam Nuts

C. Reinforcement Bracket Hole Alignment

NOTE: This process should only be used if the front and/or rear reinforcement bracket holes do not align with the riv-nut.

- 1. Remove the track bar bolt.
- 2. Install the reinforcement bracket that has a hole alignment issue using the M10 installation bolt.
- 3. Mark the M18 hole on the reinforcement bracket for the track bar bolt (Figure 33).

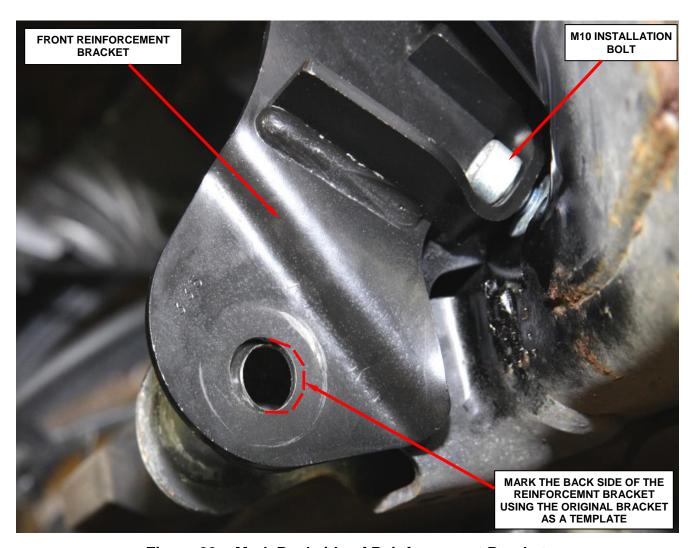


Figure 33 - Mark Backside of Reinforcement Bracket

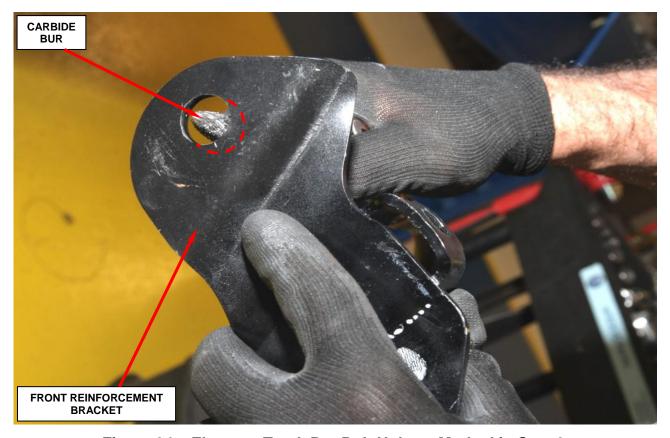


Figure 34 – Elongate Track Bar Bolt Hole as Marked in Step 3

4. Using a carbide bur, elongate the track bar bolt hole as marked in Step 3 of this procedure. Up to 3-4 mm of material may be removed.

CAUTION: Do not grind the track bar bolt hole on the original track bar bracket that is welded to the frame.

- 5. Test fit the reinforcement bracket for proper fit. Grind the track bar bolt hole on the reinforcement bracket again if required.
- 6. Install the reinforcement bracket and track bar bolt.
- 7. Return to the reinforcement bracket installation procedure and continue installing the reinforcement brackets.

D. Remove Front Axle for Welding Access

NOTE: The front axle is being removed to gain access to the front suspension track bar frame bracket. The axle should be removed just prior to the scheduled welding appointment made with the Service Technical Assistance Resource (STAR) center.

- 1. Position the truck on an appropriate hoist.
- 2. Place the vehicle in neutral.
- 3. Disconnect and isolate the negative battery cable(s) from the battery post(s).
- 4. Remove and save the front wheel/tire assemblies.
- 5. Remove and save the brake tube bracket bolt from the right and left control arm brackets (Figure 35).
- 6. Remove and save the brake tube bracket bolt from the right and left coil spring lower bracket (Figure 35).



Figure 35 - Brake Tube Brackets

7. Remove the front brake caliper retaining bolts and support the calipers using a bungee cords or equivalent (Figure 36).

CAUTION: Do not allow the brake caliper to hang from brake caliper flex hoses.

NOTE: Do not disconnect the brake caliper flex hoses from the brake caliper.

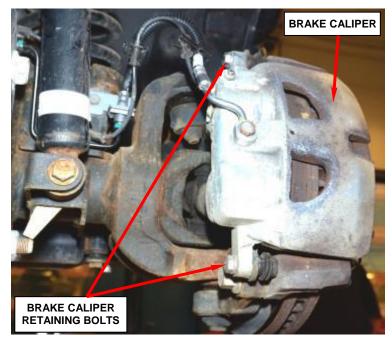


Figure 36 - Brake Caliper Retaining Bolts

8. Disconnect the Anti-Lock Brake System (ABS) wheel speed sensor electrical connector and unclip the ABS wire from brake hose (Figure 37).

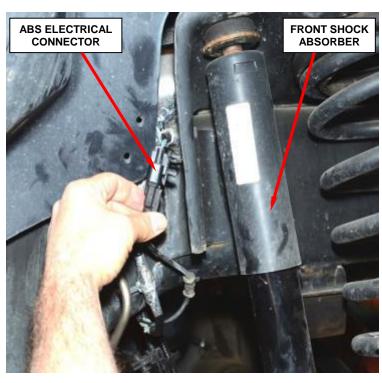


Figure 37 – ABS Wheel Speed Sensor Electrical Connector

- 9. Using special tool C-3894-A, disconnect the drag link from the pitman arm (Figure 38).
- 10. Disconnect the front axle vent hose at the front axle housing.
- 11. For vehicles with four wheel drive, mark and then disconnect the front propeller shaft from the front axle companion flange (Figure 39).

CAUTION: Do not allow the front propeller shaft to hang. Use a bungee cord to support the front propeller shaft.

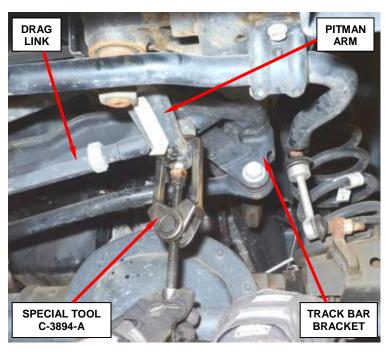


Figure 38 – Disconnect Drag Link from Pitman Arm

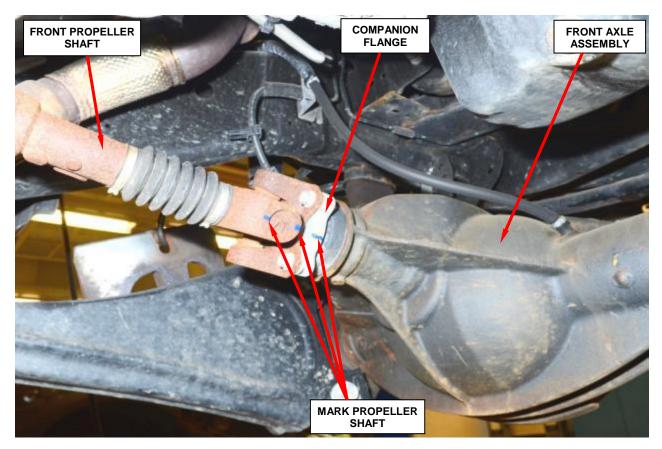


Figure 39 - Mark Front Propeller Shaft

- 12. **For vehicles with four wheel drive**, disconnect the four wheel drive actuator electrical connector (Figure 40).
- 13. Place two jack stands under the rear of the vehicle to stabilize the vehicle on the hoist when the front axle is removed (Figure 41).

WARNING: Failure to place jack stands at the rear of the vehicle could allow the vehicle to flip off the hoist when the weight of the front axle is removed.

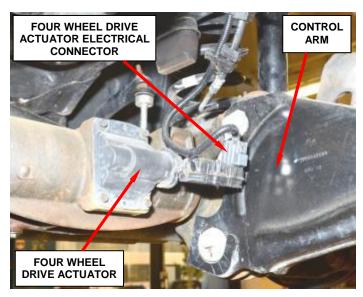


Figure 40 - Actuator Electrical Connector



Figure 41 – Secure Vehicle on Hoist with Jack Stands

14. Secure the front axle to a lifting devise (Figure 42).

WARNING: Be sure to chain and/or strap the axle to the lifting devise to prevent the axle from falling off the lifting devise.

- 15. Remove and save the track bar bolt from the frame bracket.
- 16. Remove and save the lower shock absorbers bolts from the axle brackets.

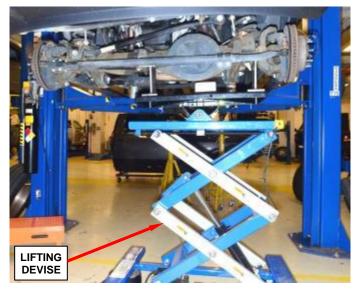


Figure 42 – Secure Axle to Lifting Devise

17. Disconnect the front suspension stabilizer bar at the frame brackets (Figure 43).

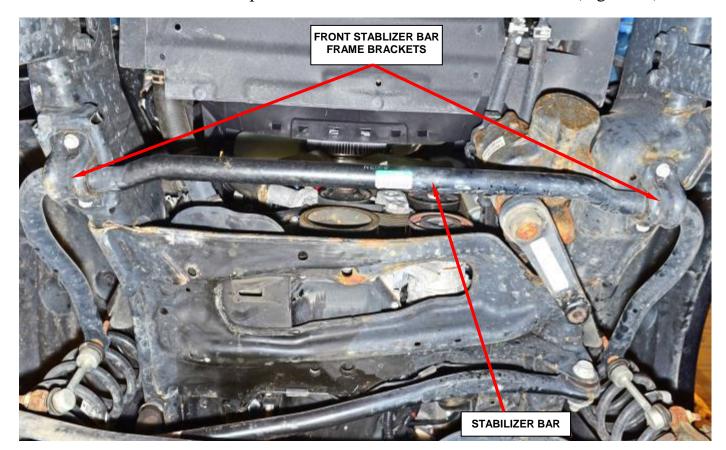


Figure 43 - Front Stabilizer Bar

- 18. Using a paint pen or equivalent, mark the right and left front coil spring orientation and location (Figure 44).
- 19. Partially lower the front axle enough to remove the front coil springs.
- 20. Remove and save the control arm rear bushing bolts (Figure 45).

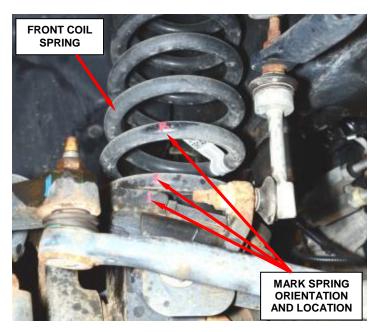


Figure 44 – Mark Front Coil Spring Orientation and Location



Figure 45 - Control Arm Bushing Bolts

- 21. With the help of an assistant, carefully lower the front axle assembly (Figure 46).
- 22. Move the front axle assembly to a safe location.
- 23. Clear the work area of any flammable liquids and/or debris.
- 24. Install welding curtains around the front of the vehicle.
- 25. After welding process is complete, continue with **Section E. Install Front Axle**.

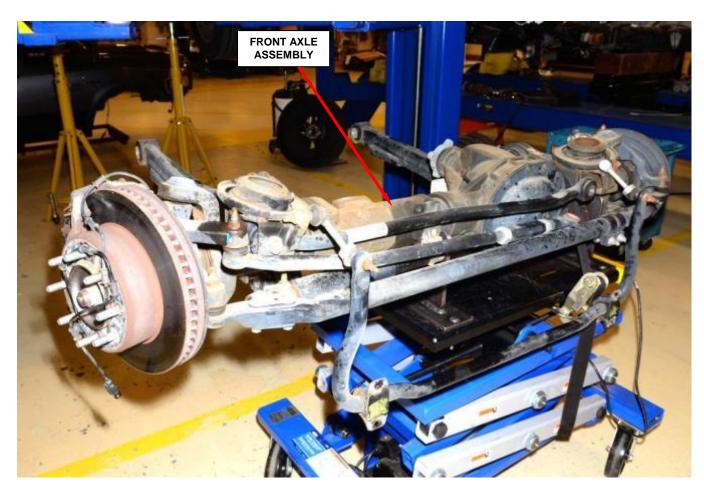


Figure 46 – Lower Axle Assembly and Store in Safe Location

E. Install Front Axle

- 1. With the help of an assistant, carefully raise the front axle assembly into position.
- 2. Install the control arm rear bushing bolts. Do not tighten at this time.
- 3. Lower the axle enough to install the front coil springs.
- 4. Raise the front axle into position.
- 5. Install the lower shock absorber bolts and tighten to 100 ft. lbs. (136 N·m) (Figure 47).

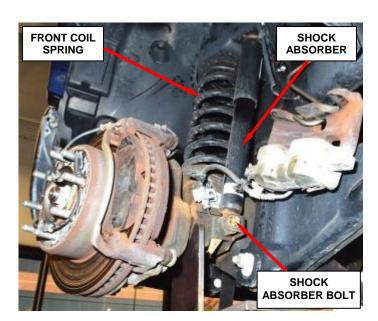


Figure 47 – Shock Absorber Bolt

- 6. Remove the lifting devise from the front axle.
- 7. Connect the drag link to the pitman arm. Tighten the nut to 27 ft. lbs. (37 N⋅m). Then tighten the nut an additional ½ turn (Figure 48).
- 8. Place the track bar into position and install the track bar bolt at the frame bracket. Do not tighten at this time (Figure 48).
- 9. Connect the front suspension stabilizer bar at the frame. Tighten the fasteners to 43 ft. lbs. (58 N·m).
- 10. For vehicles with four wheel drive actuator electrical connector (Figure 40).

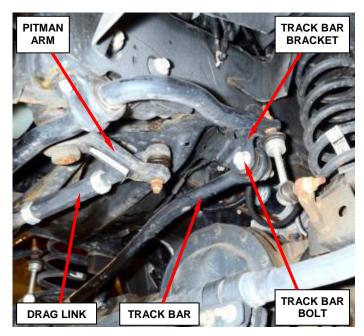


Figure 48 – Pitman Arm Nut and Track Bar Bolt

- 11. **For vehicles with four wheel drive**, connect the front propeller shaft to the front axle companion flange. Tighten the four fasteners to 55 ft. lbs. (75 N·m).
- 12. **For vehicles with four wheel drive**, connect the front axle vent hose to the front axle housing.
- 13. Remove the jack stands and partially lower the vehicle (Figure 41).
- 14. Install the brake tube bolt from the coil spring lower bracket (Figure 35).
- 15. Install the brake tube bracket bolt from the control arm brackets (Figure 35).
- 16. Route the ABS speed sensor wire along the brake tube and then connect the Anti-Lock Brake System (ABS) wheel speed sensor electrical connector (Figure 37).
- 17. Install the front brake calipers (Figure 36). Tighten the brake caliper retaining bolts to 55 ft. lbs. (75 N·m).
- 18. Install the front wheel assemblies. Tighten the lug nuts to 130 ft. lbs. (176 N·m).
- 19. With the full weight of the vehicle on the suspension, tighten the control arm rear bushing bolts on the left and right side. Tighten the bolts to 133 ft. lbs. (180 N⋅m). Then tighten the control arm bolts an additional ¼ turn.
- 20. With the full weight of the vehicle on the suspension, tighten track bar bolt to 285 ft. lbs. (386 N·m).
- 21. Pump the brakes several times to move front brake pads against the brake rotor.
- 22. Connect the negative battery cable(s) to the negative battery post(s).
- 23. Place the truck on an alignment rack and perform a complete front end alignment.

 NOTE: Follow the alignment rack manufacturer's instructions to complete the alignment.
- 24. Road test the vehicle to verify alignment results.
- 25. Return the vehicle to the customer.

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 FCA to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

| | Labor Operation Time | |
|--------------------------------------|----------------------|------------------|
| | <u>Number</u> | Allowance |
| Inspect front suspension track | | |
| bar frame brackets (4x2 models only) | 13-01-01-90 | 0.2 hours |

NOTE: The above inspection Labor Operation Number <u>must be processed on a warranty claim</u> using the "UC" failure code. Do not use the labor operations below for a 4x2 truck that only required an inspection. Using the labor operation above will keep the recall in "OPEN" status so that when reinforcement brackets become available the recall can be completed.

| Inspect front suspension track bar frame brackets. Vehicle is a Power Wagon model or the vehicle has been modified with aftermarket suspension components and the recall parts cannot be installed | 13-R4-61-81 | 0.2 hours | |
|--|-------------|-----------|--|
| Remove/install front axle for welding access (includes inspection) | 13-R4-61-82 | 2.9 hours | |
| Install reinforcement brackets (includes inspection) (4x4 only) | 13-R4-61-83 | 1.7 hours | |
| Related Operation | | | |
| Weld Repair Hoist Time (only to be used with 13-R4-61-82) | 13-R4-61-50 | 4.0 hours | |
| Center Steering Wheel (only to be used with 13-R4-61-83) | 13-R4-61-51 | 0.6 hours | |
| Elongate reinforcement bracket hole(s) (only to be used with 13-R4-61-83) | 13-R4-61-52 | 0.5 hours | |
| Optional Equipment | | | |
| Four Wheel Drive (only to be used with 13-R4-61-82) | 13-R4-61-60 | 0.3 hours | |

Completion Reporting and Reimbursement (Continued)

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.

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 FCA 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 <u>updated</u> VIN list of <u>their incomplete</u> 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 <u>must</u> perform this repair on all unsold vehicles <u>before</u> 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 FCA US LLC





IMPORTANT SAFETY RECALL

R46 / NHTSA 15V-541

This notification letter is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

Dear: (Name)

FCA US LLC has decided that a defect, which relates to motor vehicle safety, exists in certain 2013 and 2014 model year 2500/3500 series RAM trucks and 3500 series RAM cab chassis trucks.

The problem is...

Some of the above vehicles may have a front suspension track bar frame bracket that was improperly welded during the manufacturing process. The front suspension track bar frame bracket welds may break and allow the front suspension track bar frame bracket to separate from the frame rail. A separated front suspension track bar frame bracket will cause diminished steering response and could cause a crash without warning.

What your dealer will do...

FCA will repair your vehicle free of charge. To do this, your dealer will inspect the track bar bracket and replace the track bar bracket if cracked. Track bar bracket replacement could take several days. If the track bar bracket is not cracked, track bar reinforcement brackets will be installed. Installing the track bar reinforcement brackets will only take about 3 hours. However, additional time may be necessary depending on service schedules.

What you must do to ensure your safety...

Simply **contact your Chrysler, Jeep, Dodge or RAM 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. **Please 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 the FCA Recall Assistance Center 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. If you have further questions go to **recalls.mopar.com**.

If you have already experienced this specific condition and have paid to have it repaired, you may visit www.fcarecallreimbursement.com to submit your reimbursement request online or you can mail your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement. Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you've had previous repairs and/or reimbursement you may still need to have the recall repair performed on your vehicle.

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 you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to **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 FCA US LLC