FIAT CHRYSLER AUTOMOBILES

September 2015

Dealer Service Instructions for:

Safety Recall R34 / NHTSA 15V-468
Front Suspension Upper Control Arms

Models

2015 (DP) RAM Truck (4500 and 5500 series)

NOTE: This recall applies only to the above vehicles built from January 30, 2015 through February 06, 2015 ***(MDH 013013 through 020602)***.

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 upper control arms on about 190 of the above vehicles may have been improperly welded during the manufacturing process. The weld connecting the bushing loop to the upper control arm could break under certain driving conditions. A broken upper control arm could cause a loss of vehicle stability and/or a crash without warning.

Repair

Both front suspension upper control arms must be replaced.

Parts Information

Part Number	Description
52855625AB	**Arm, Upper Control (order 2 per vehicle)**
06104289AA	**Bolt, Upper Control Arm (order 2 per vehicle)**
06104283AA	**Bolt, Upper Control Arm (order 2 per vehicle)**
06104720AA	**Nut, Upper Control Arm (order 4 per vehicle)**

Each dealer to whom vehicles in the recall were assigned will receive enough parts to service about 20% of those vehicles.

For Diesel engine equipped vehicles, order one of each of the parts listed below:

Part Number	Description
52122213AB	**Gasket, Front Exhaust Pipe-to-Diesel Particulate Filter (DPF)**
68071676AA	**Ring, Turbocharger-to-Front Exhaust Pipe Seal**
52121859AD	**Clamp, Turbocharger-to-Front Exhaust Pipe**

Parts Return

Please make sure to retain this part until the recall claim is paid and the parts disposition has been determined. **This recall part will be subject to parts return**.

Special Tools

No special tools are required to perform this service procedure.

Service Procedure

A. Front Suspension Upper Control Arms (equipped with gas engine)

CAUTION: Only replace one upper control arm at a time to maintain front end alignment.

1. Raise and support the vehicle on an appropriate drive-on hoist.

   CAUTION: New nuts and bolts must be used when replacing the front suspension upper control arms. Discard the original nuts and bolts.

2. Using Mopar Rust Penetrating Oil, spray the four exhaust manifold nuts and bolts.

3. Use the following procedure to replace the right side front suspension upper control arm:

   a. Remove and discard the upper control arm nut and bolt at the axle bracket (Figure 1).

   b. Remove and discard the upper control arm nut and bolt at the frame rail (Figure 1).

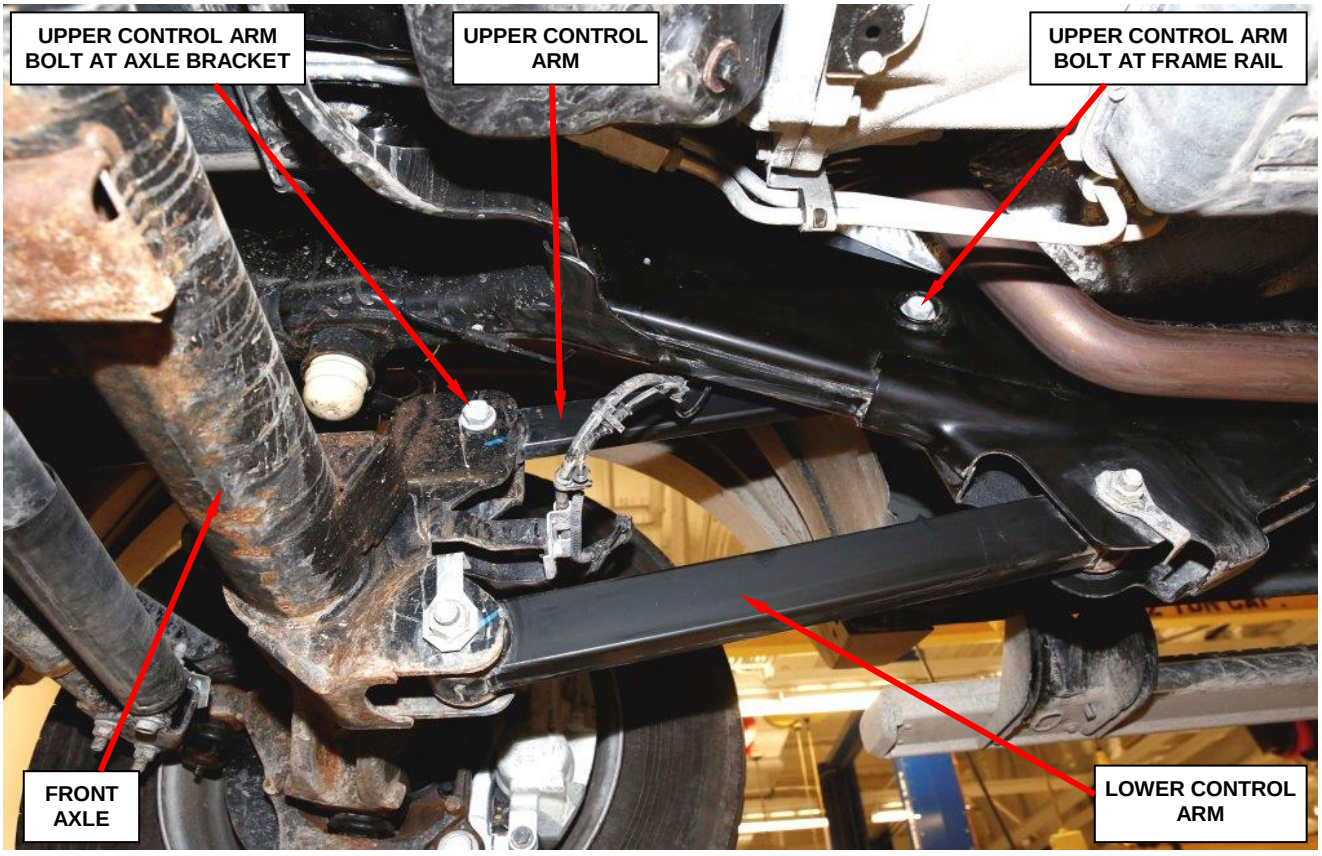

Figure 1 – Front Suspension Upper Control Arm Bolts

Service Procedure (Continued)

c. Remove the original upper control arm (Figure 2).

d. Position the new upper control arm at the axle bracket and frame rail.

e. Install the new upper control arm nut and bolt at the frame rail hand tight.

f. Install the new upper control arm nut and bolt at the axle bracket hand tight.

g. With full vehicle weight on the suspension, tighten the new upper control arm nut and bolt at the frame rail bracket to 185 ft. lbs. (250 N·m).

h. With full vehicle weight on the suspension, tighten the new upper control arm nut and bolt at the axle bracket to 185 ft. lbs. (250 N·m).

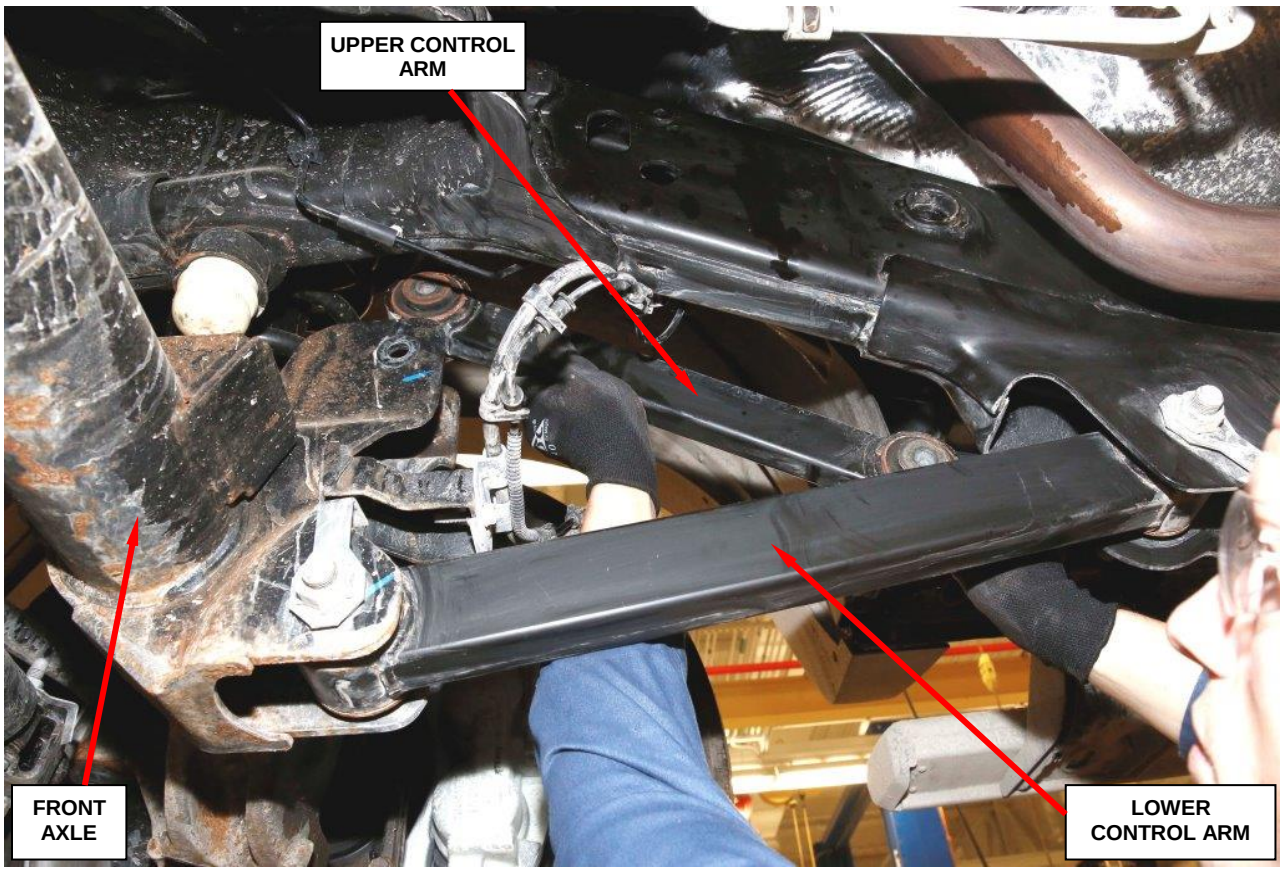

Figure 2 – Upper Control Arm Removal

Service Procedure (Continued)

4. Use the following procedure to replace the left side front suspension upper control arm:

   a. Disconnect the exhaust system at the engine exhaust manifolds (Figure 3).

   b. Carefully reposition the exhaust system as required to gain access to the front suspension upper control arm bolt (Figure 3).

   CAUTION: Use extreme care not to damage the oxygen sensor wires when relocating the exhaust pipe.

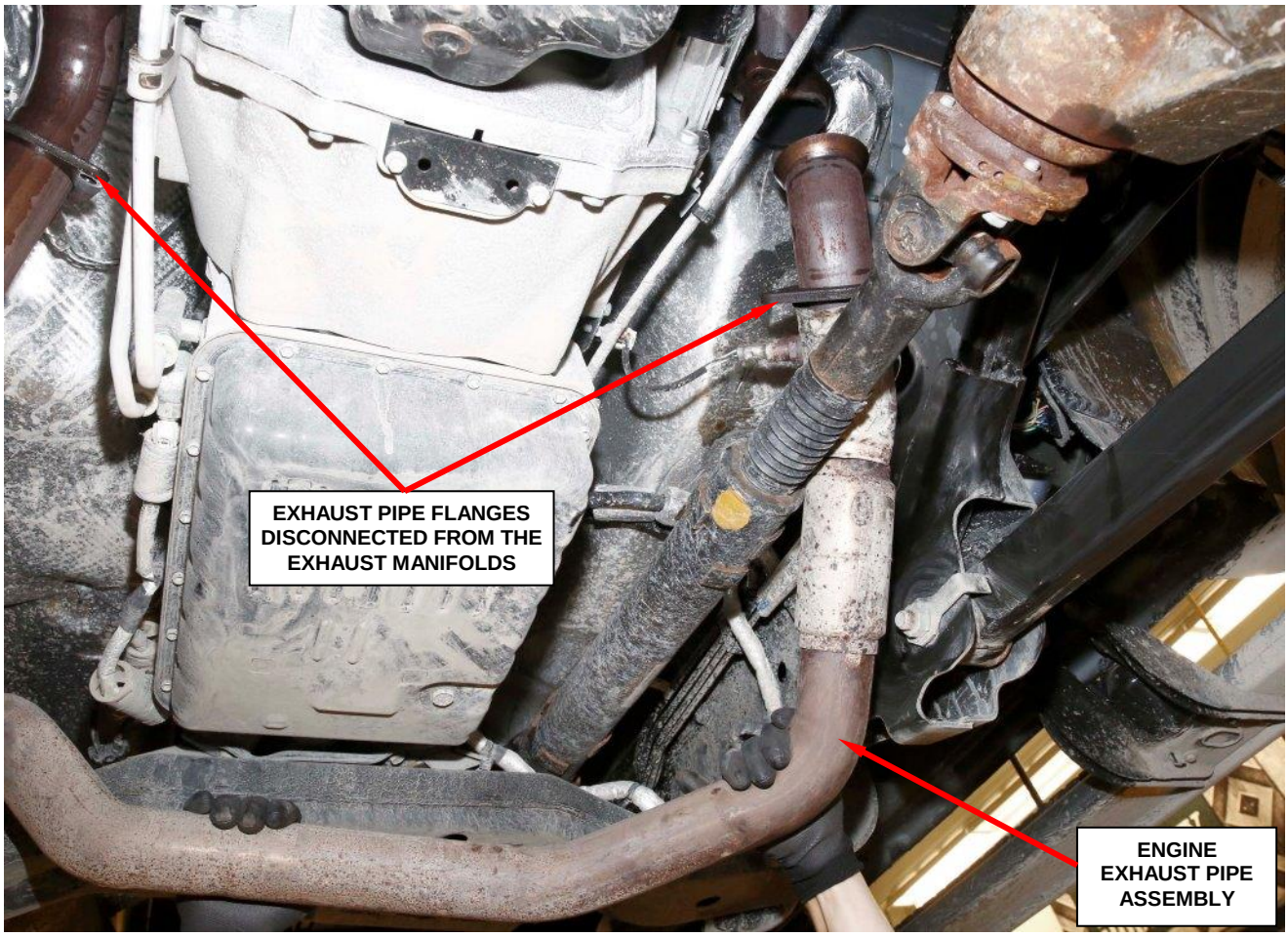

Figure 3 – Exhaust System

Service Procedure (Continued)

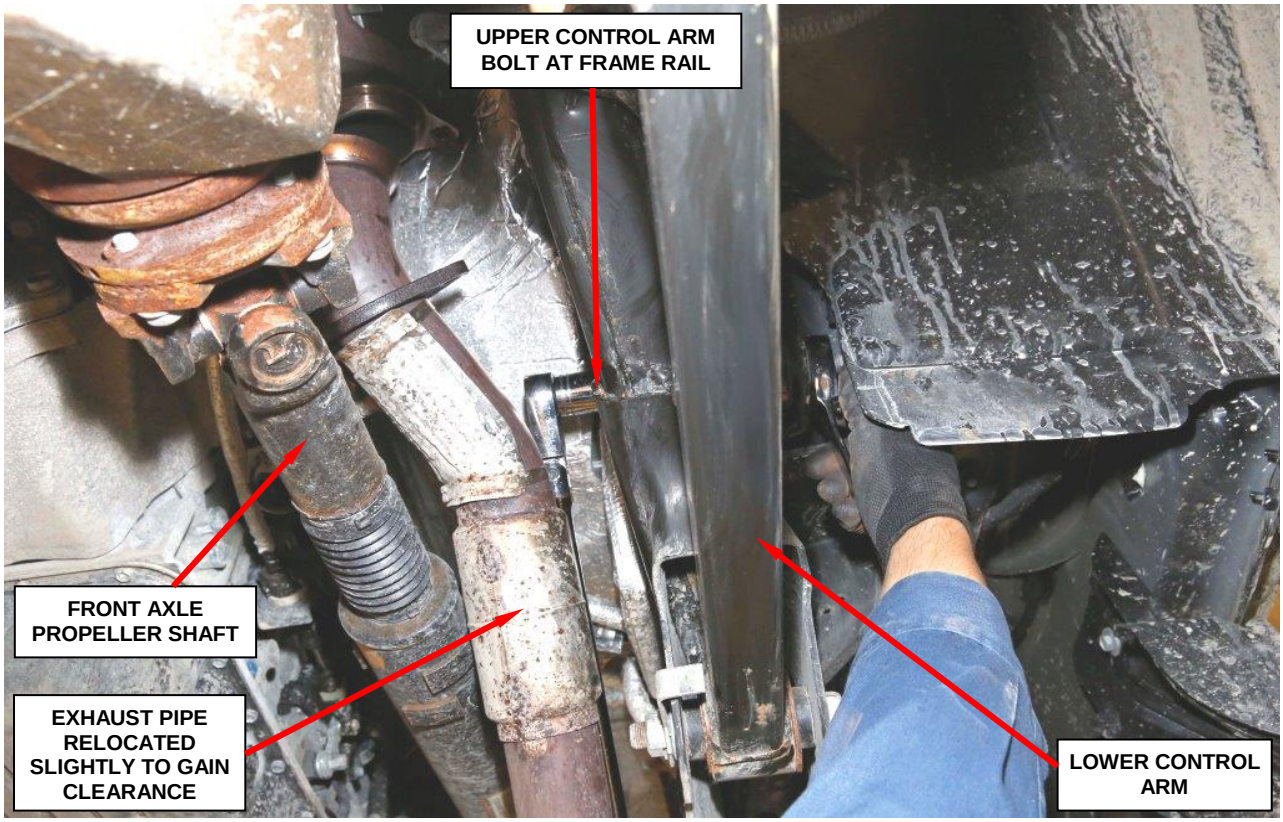

Figure 4 – Upper Control Arm Bolt at Frame Rail

c. Remove and discard the upper control arm nut and bolt at the axle bracket.

d. Remove and discard the upper control arm nut and bolt at the frame rail (Figure 4).

e. Remove the original upper control arm from the vehicle.

f. Position the new upper control arm at the axle bracket and frame rail.

g. Install the new upper control arm nut and bolt at the frame rail hand tight.

h. Install the new upper control arm nut and bolt at the axle bracket hand tight.

Service Procedure (Continued)

i. With full vehicle weight on the suspension, tighten the new upper control arm nut and bolt at the frame rail bracket to 185 ft. lbs. (250 N·m).

j. With full vehicle weight on the suspension, tighten the new upper control arm nut and bolt at the axle bracket to 185 ft. lbs. (250 N·m).

k. Reconnect the exhaust pipes at the engine exhaust manifolds. Tighten the exhaust manifold-to-exhaust pipe bolts to 24 ft. lbs. (18 N·m).

5. If the vehicle **had** a broken upper control arm(s), continue with **Section C. Front End Alignment and Steering Gear Poppet Valves Adjustment.**

6. If the vehicle **did not** have broken upper control arm(s), lower the vehicle from the hoist and return the vehicle to the customer.

   NOTE: Front end alignment and poppet valves adjustment is only required on vehicles that came in with a broken front suspension upper control arm(s).

Service Procedure (Continued)

B. Front Suspension Upper Control Arms (equipped with diesel engine)

CAUTION: Only replace one upper control arm at a time to maintain front end alignment.

1. Raise and support the vehicle on an appropriate drive-on hoist.

   CAUTION: New nuts and bolts must be used when replacing the front suspension upper control arms. Discard the original nuts and bolts.

2. Use the following procedure to replace the left side front suspension upper control arm:

   a. Remove and discard the upper control arm nut and bolt at the axle bracket (Figure 5).

   b. Remove and discard the nut and bolt at the frame rail and remove the original upper control arm.

   c. Position the new upper control arm at the axle bracket and frame rail.

   d. Install the new upper control arm bolts and finger-tighten the new upper control arm nuts.

   e. With full vehicle weight on the suspension, tighten the right and left side nuts at the axle bracket and frame bracket to 185 ft. lbs. (250 N·m).

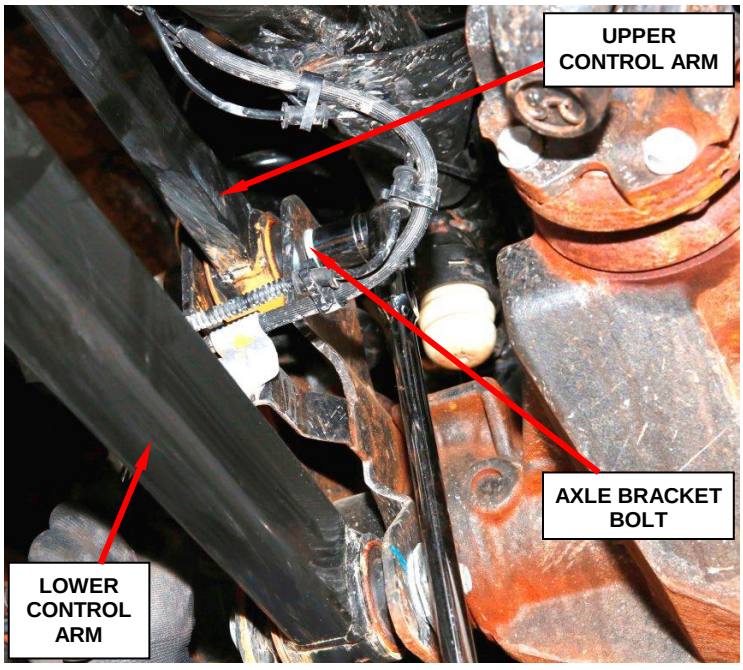

Figure 5 – Axle Bracket Bolt

Service Procedure (Continued)

3. Use the following procedure to replace the right side front suspension upper control arm:

   a. Disconnect the turbocharger outlet-to-front exhaust pipe band clamp (Figure 6).

   b. Disconnect the transmission oil cooler tube bracket from the exhaust mount bracket.

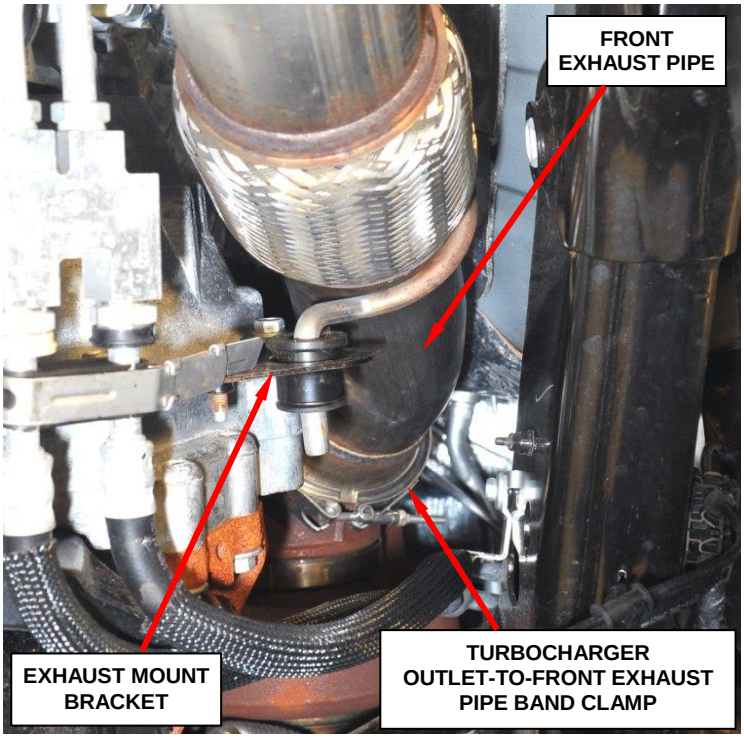

Figure 6 – Turbocharger Outlet-to-Front Exhaust Pipe Band Clamp

   c. Disconnect the exhaust mount bracket at the transmission bellhousing (Figure 7).

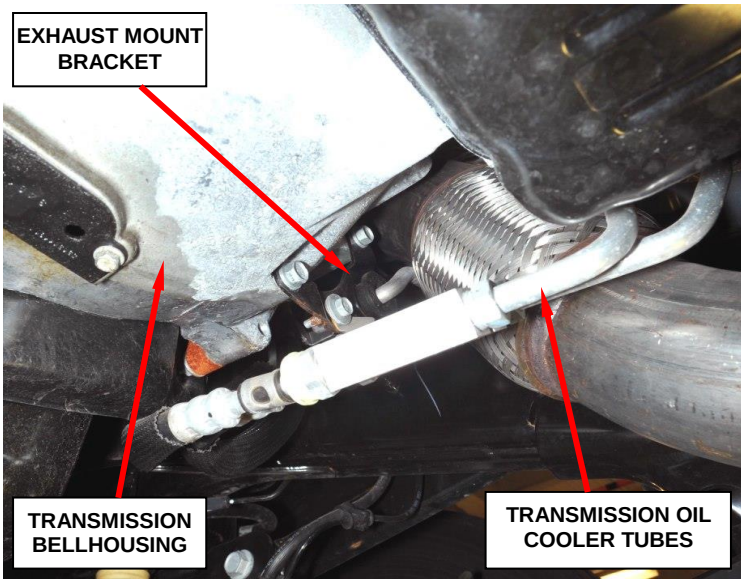

Figure 7 – Exhaust Mount Bracket

Service Procedure (Continued)

d. Remove and save the three front exhaust pipe-to-Diesel Particulate Filter (DPF) flange nuts (Figure 8).

e. Carefully lower the front exhaust pipe to gain access to the upper control arm bolt at the frame rail (Figure 9).

NOTE: Do not completely remove the front exhaust pipe from the vehicle.

f. Remove and discard the upper control arm nut and bolt at the frame rail (Figure 9).

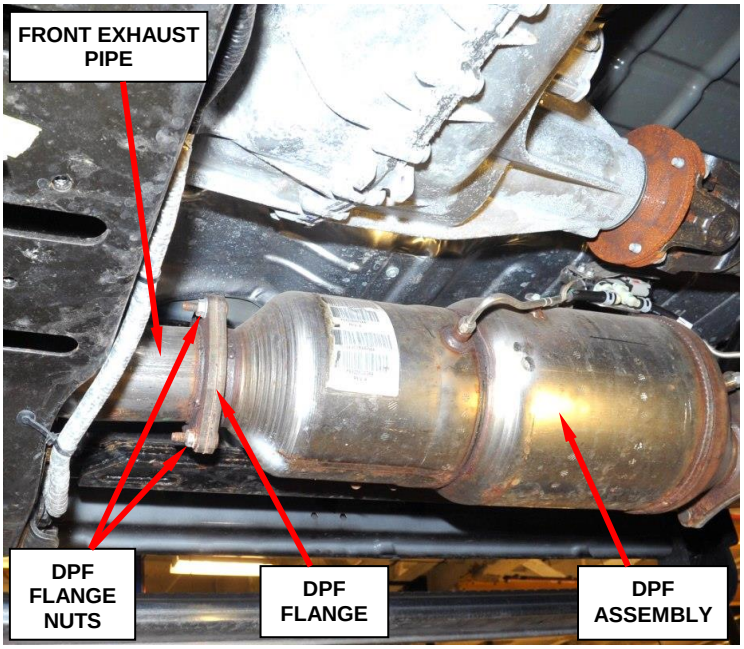

Figure 8 – Front Exhaust Pipe-to-DPF Flange Nuts

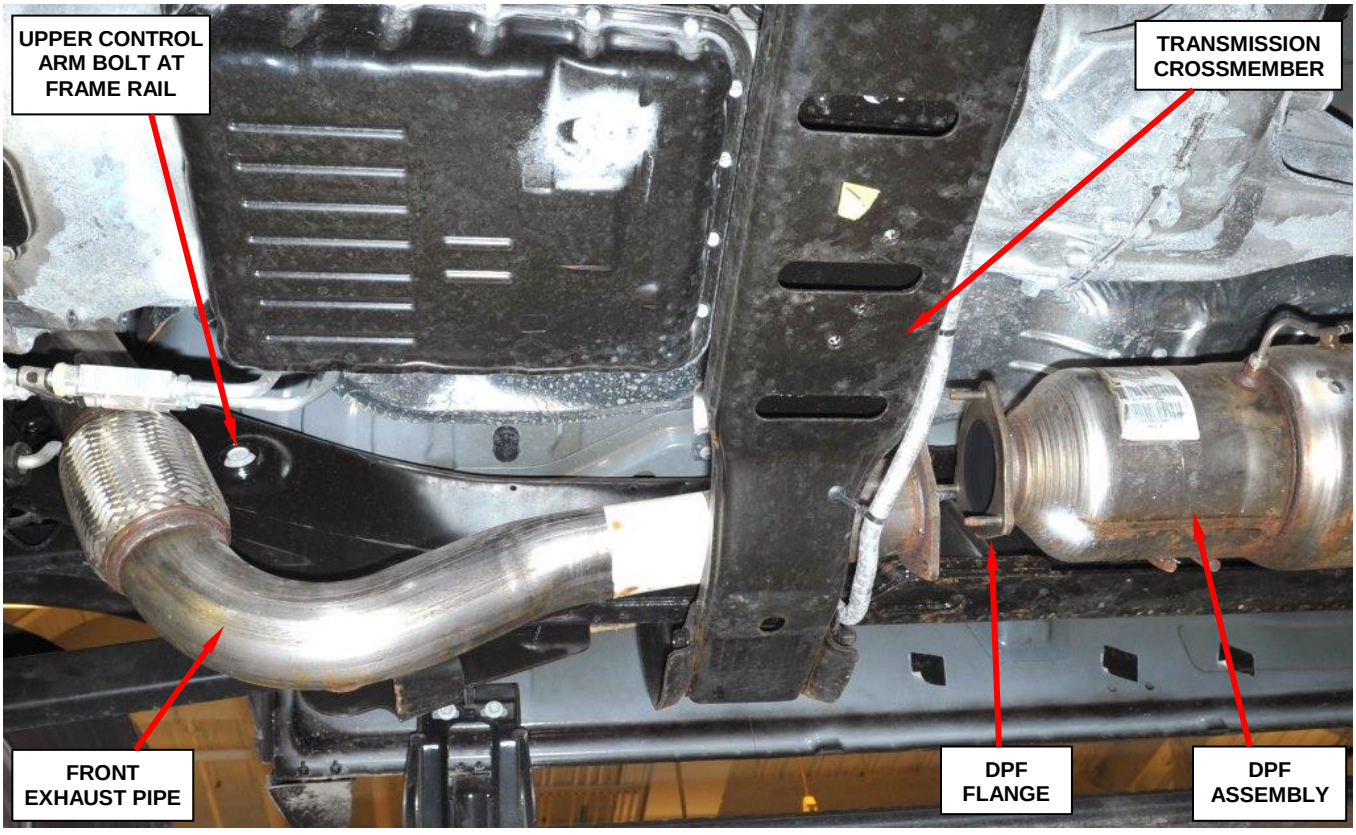

Figure 9 – Lower Front Exhaust Pipe to Gain Access to Upper Control Arm Bolt

Service Procedure (Continued)

g. Remove and discard the upper control arm nut and bolt at the axle bracket.

h. Remove the original upper control arm from the vehicle.

i. Position the new upper control arm at the axle bracket and frame rail.

Figure 10 – Turbocharger Outlet-to-Front Exhaust Pipe Band Clamp

j. Install the new bolts, then finger tighten the new nuts.

k. With full vehicle weight on the suspension, tighten the upper control arm nuts at the axle bracket and frame bracket to 185 ft. lbs. (250 N·m).

l. Remove and discard the original turbocharger outlet-to-front exhaust pipe band clamp (Figure 10).

m. Install the new turbocharger outlet-to-front exhaust pipe band clamp into position (Figure 10).

Service Procedure (Continued)

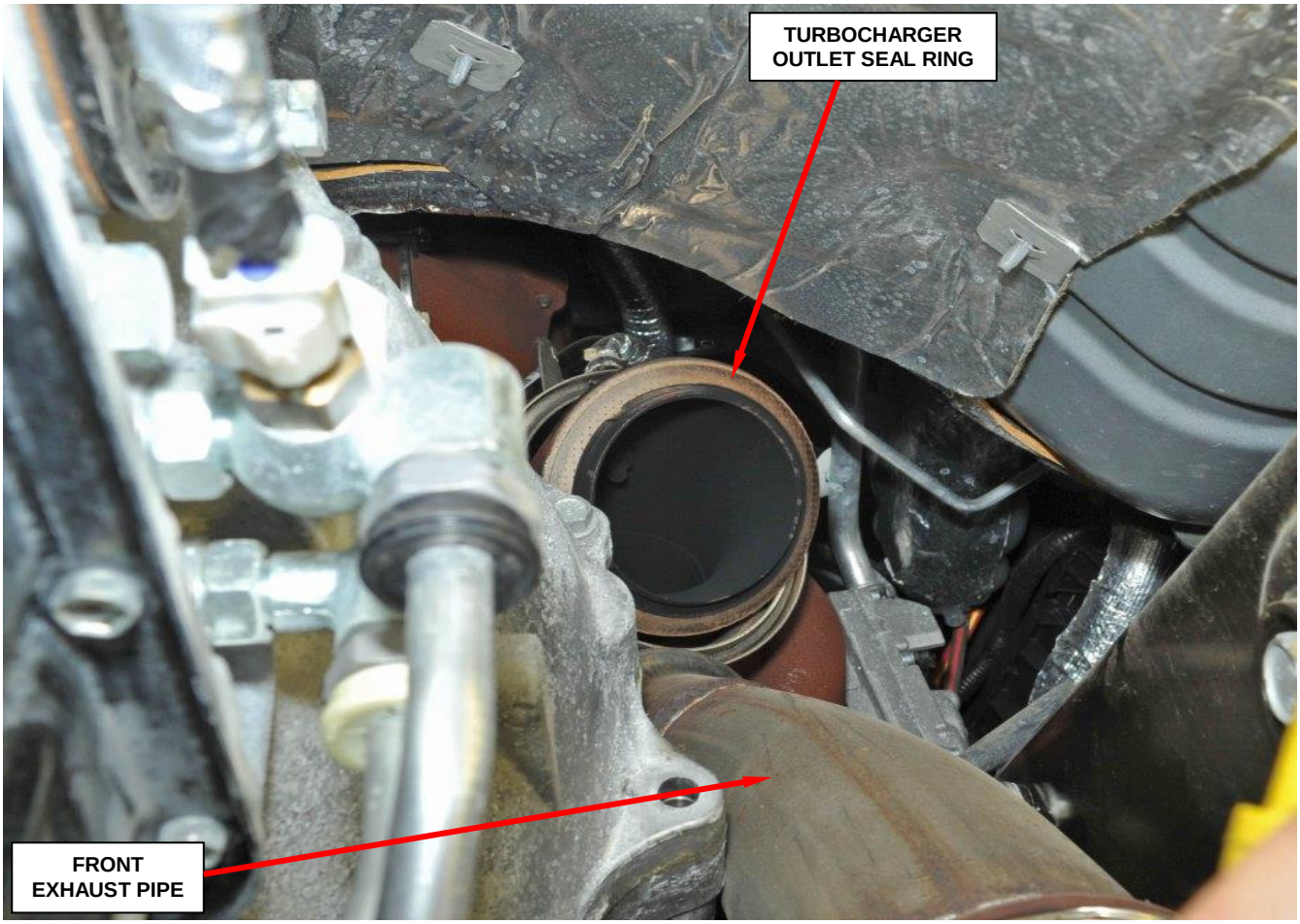

Figure 11 – Turbocharger Outlet Seal Ring

n. Remove and discard the original turbocharger outlet seal ring (Figure 11).

o. Install a new turbocharger outlet seal ring (Figure 11).

p. Remove and discard the original front exhaust pipe-to-DPF gasket.

q. Clean the front exhaust pipe-to-DPF flanges and install the new gasket.

r. Place the front exhaust pipe into position.

s. Connect the rubber exhaust mount bracket at the transmission bellhousing hand tight.

t. Install the turbocharger outlet-to-front exhaust pipe band clamp hand tight.

Service Procedure (Continued)

u. Install the three front exhaust pipe-to-Diesel Particulate Filter (DPF) flange nuts. Tighten the three nuts to 44 ft. lbs. (60 N·m).

v. Tighten the exhaust mount bracket mounting bolts to 32 ft. lbs. (44 N·m).

w. Tighten the turbocharger outlet-to-front exhaust pipe band clamp to 13 ft. lbs. (18 N·m).

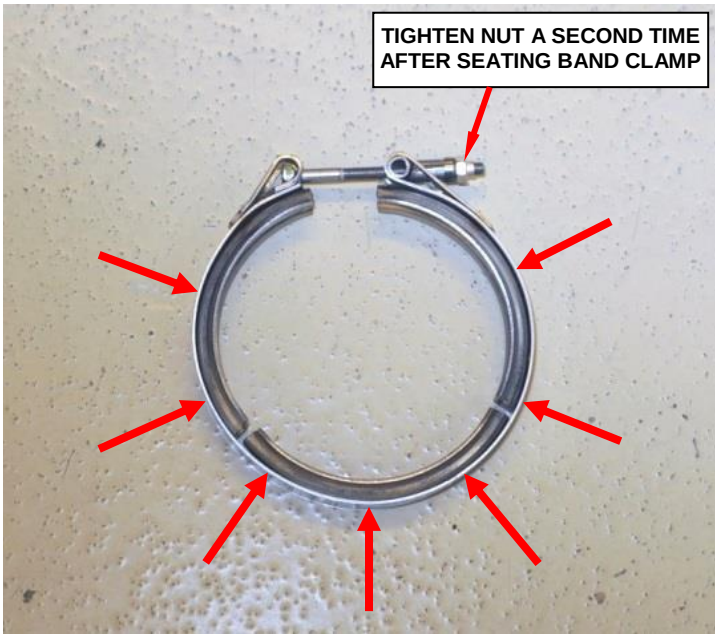

Figure 12 – Tap Around the Clamp with a Hammer to Seat Band Clamp

x. Using a small hammer, lightly tap around the outside diameter of the turbocharger outlet-to-front exhaust pipe band clamp to seat the clamp (Figure 12).

y. Tighten the turbocharger outlet-to-front exhaust pipe band clamp again to 13 ft. lbs. (18 N·m).

CAUTION: Failure to seat the band clamp and tightening the nut a second time could result in an exhaust leak.

5. If the vehicle **had** a broken upper control arm(s), continue with **Section C. Front End Alignment and Steering Gear Poppet Valves Adjustment.**

6. If the vehicle **did not** have broken upper control arm(s), lower the vehicle from the hoist and return the vehicle to the customer.

NOTE: Front end alignment and poppet valves adjustment is only required on vehicles that came in with a broken front suspension upper control arm(s).

Service Procedure (Continued)

C. Front End Alignment and Steering Gear Poppet Valves Adjustment

1. Place the vehicle on an appropriate alignment rack.
2. Install wheel alignment equipment following the alignment machine instructions.
3. Use the following alignment specifications:

4500/5500 SERIES - WHEEL BASE 144.5, 164.4, 168.5, 173.4

FRONT ALIGNMENT	PREFERRED SETTING	ACCEPTABLE RANGE
CAMBER - LEFT	0.10°	-0.40° to +0.60°
CAMBER - RIGHT	0.10°	-0.40° to +0.60°
CROSS-CAMBER	0.00°	-0.50° to +0.50°
CASTER - LEFT	+7.80°	+7.30° to +8.30°
CASTER - RIGHT	+8.10°	+7.60° to +8.60°
CROSS-CASTER	0.30°	+0.20° to 0.80°
TOE - TOTAL*	+0.20°	+0.10° to +0.30°
Positive toe (+) is toe-in and negative toe (−) is Toe-out.		
* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE should be equally split between each wheel on the same axle to ensure the steering wheel is centered after setting toe.		

REAR ALIGNMENT	PREFERRED SETTING	ACCEPTABLE RANGE
CAMBER	-0.10°	-0.45° to +0.25°
CROSS-CAMBER	0.00°	-0.30° to +0.30°
TOE - TOTAL*	+0.10°	-0.20° to +0.40°
THRUST ANGLE	0.00°	-0.40° to +0.40°
Positive toe (+) is toe-in and negative toe (−) is Toe-out.		
* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE should be equally split between each wheel on the same axle to ensure the steering wheel is centered after setting toe.		

Service Procedure (Continued)

4500/5500 SERIES - WHEEL BASE 192.5, 197.4

FRONT ALIGNMENT	PREFERRED SETTING	ACCEPTABLE RANGE
CAMBER - LEFT	0.10°	-0.40° to +0.60°
CAMBER - RIGHT	0.10°	-0.40° to +0.60°
CROSS-CAMBER	0.00°	-0.50° to +0.50°
CASTER - LEFT	+8.30°	+7.80° to +8.80°
CASTER - RIGHT	+8.60°	+8.10° to +9.10°
CROSS-CASTER	0.30°	+0.20° to -0.80°
TOE - TOTAL*	+0.20°	+0.10° to +0.30°
Positive toe (+) is toe-in and negative toe (−) is Toe-out.		
* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE should be equally split between each wheel on the same axle to ensure the steering wheel is centered after setting toe.		

REAR ALIGNMENT	PREFERRED SETTING	ACCEPTABLE RANGE
CAMBER	-0.10°	-0.45° to +0.25°
CROSS-CAMBER	0.00°	-0.30° to +0.30°
TOE - TOTAL*	+0.10°	-0.20° to +0.40°
THRUST ANGLE	0.00°	-0.40° to +0.40°
Positive toe (+) is toe-in and negative toe (−) is Toe-out.		
* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE should be equally split between each wheel on the same axle to ensure the steering wheel is centered after setting toe.		

Service Procedure (Continued)

4500/5500 SERIES - WHEEL BASE 204.5

FRONT ALIGNMENT	PREFERRED SETTING	ACCEPTABLE RANGE
CAMBER - LEFT	0.10°	-0.40° to +0.60°
CAMBER - RIGHT	0.10°	-0.40° to +0.60°
CROSS-CAMBER	0.00°	-0.50° to +0.50°
CASTER - LEFT	+8.60°	+7.60° to +9.60°
CASTER - RIGHT	+8.90°	+7.90° to +9.90°
CROSS-CASTER	0.30°	-0.20° to +0.80°
TOE - TOTAL*	+0.20°	+0.10° to +0.30°
Positive toe (+) is toe-in and negative toe (−) is Toe-out.		
* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE should be equally split between each wheel on the same axle to ensure the steering wheel is centered after setting toe.		

REAR ALIGNMENT	PREFERRED SETTING	ACCEPTABLE RANGE
CAMBER	-0.10°	-0.45° to +0.25°
CROSS-CAMBER	0.00°	-0.30° to +0.30°
TOE - TOTAL*	+0.10°	-0.20° to +0.40°
THRUST ANGLE	0.00°	-0.40° to +0.40°
Positive toe (+) is toe-in and negative toe (−) is Toe-out.		
* TOTAL TOE is the sum of both the left and right wheel toe settings. TOTAL TOE should be equally split between each wheel on the same axle to ensure the steering wheel is centered after setting toe.		

4. Use the following procedure to adjust the steering gear central poppet valve:

   a. Place the front wheels in the straight ahead position.

   b. Remove and save the central poppet valve adjustment screw rubber protective cap (Figure 13).

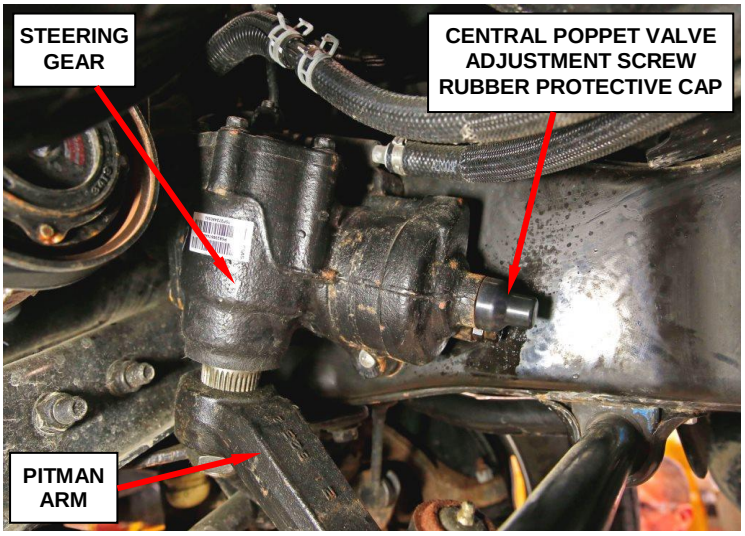

Figure 13 – Central Poppet Adjustment Screw Rubber Protective Cap

Service Procedure (Continued)

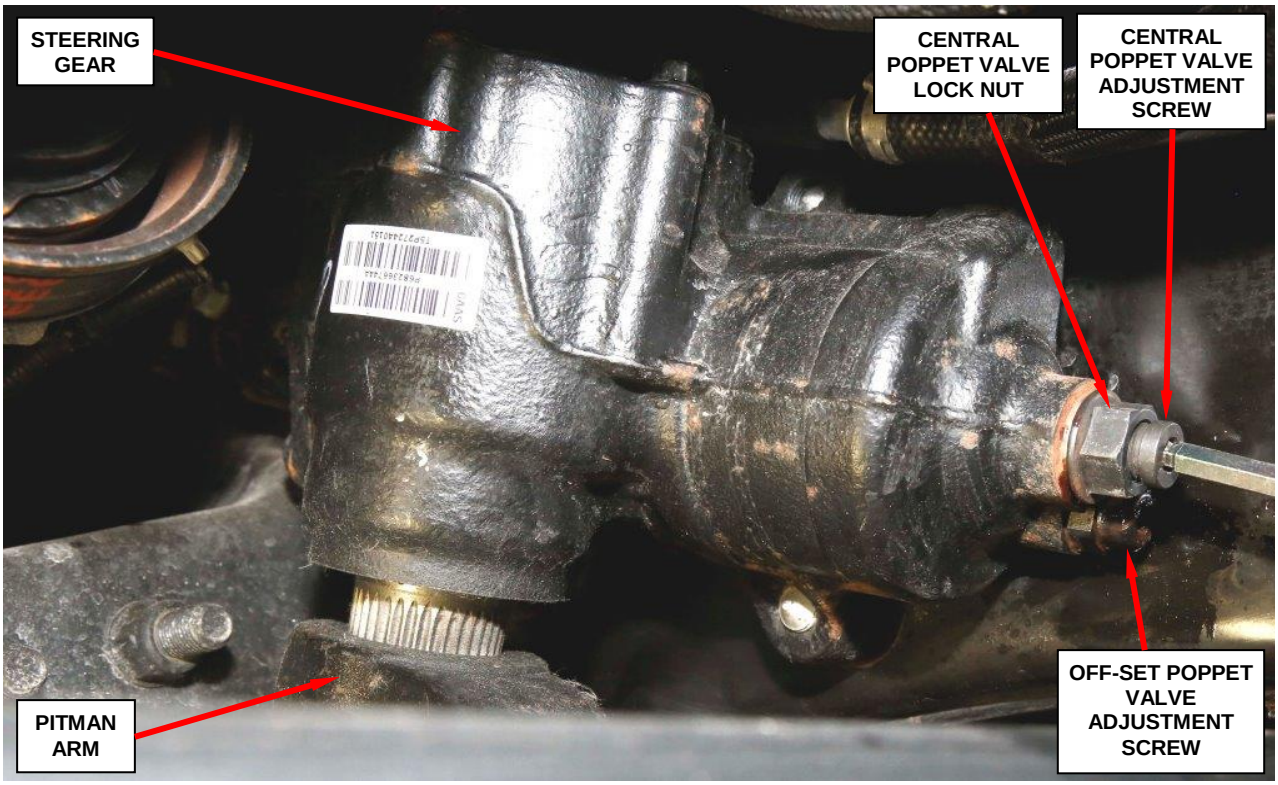

Figure 14 – Central Poppet Valve Lock Nut and Adjustment Screw

c. Loosen the central poppet valve adjustment screw lock nut (Figure 14).

d. While holding the lock nut, tighten the central poppet adjustment screw until it bottoms out in the steering gear (Figure 14). This will bottom the internal central poppet valve.

NOTE: With the central poppet valve bottomed in the steering gear, when the steering is cycled, the central poppet valve self-adjusts to the proper position. In essence, the central poppet valve adjuster screw is only being used as a tool to bottom the central poppet valve.

Service Procedure (Continued)

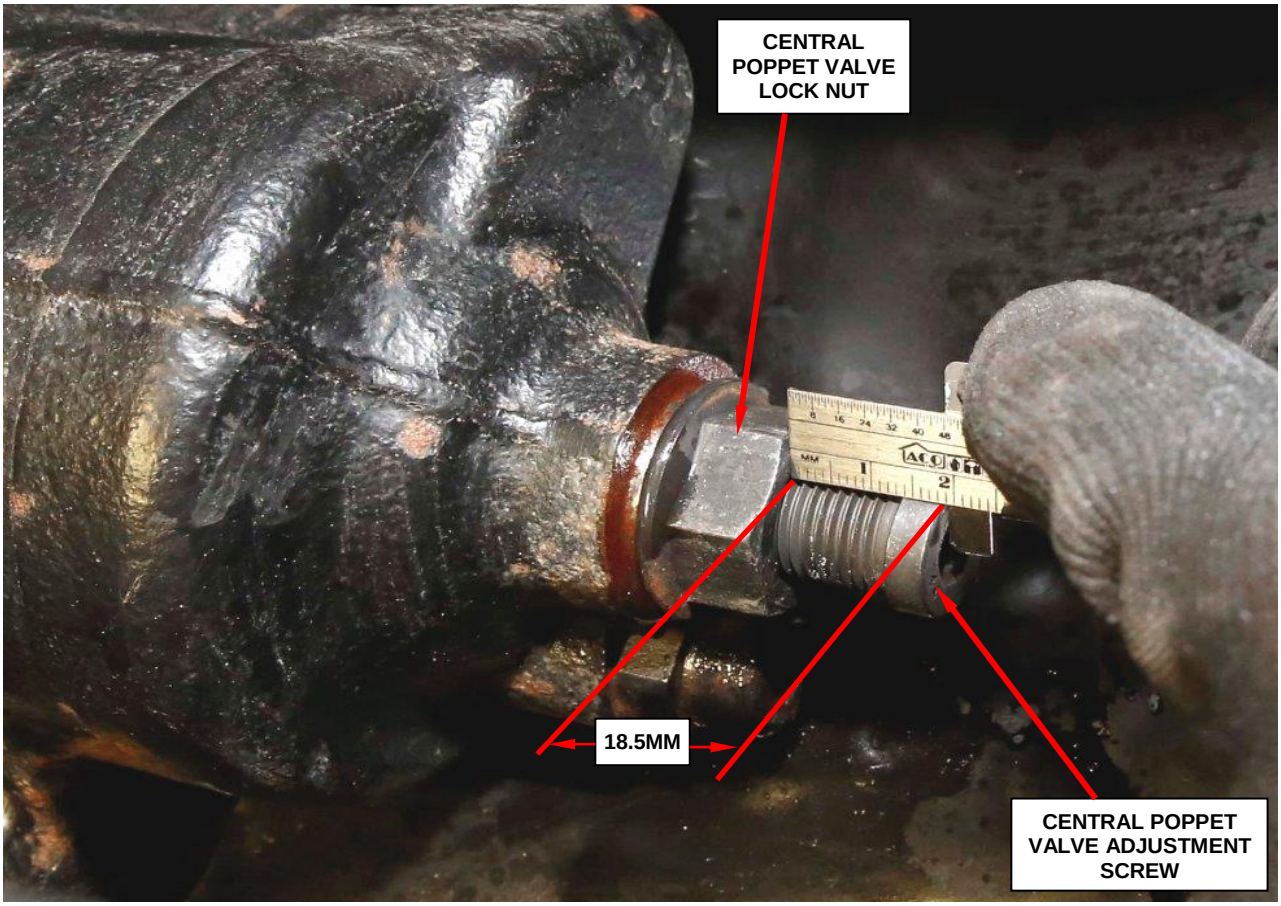

Figure 15 – Adjust and Lock Down the Central Poppet Valve

e. While holding the central poppet valve adjustment screw lock nut, back off the central poppet adjustment screw until 18.5 mm of the screw is protruding from the lock nut (Figure 15).

f. Tighten the central poppet valve adjustment screw lock nut to 90 ft. lbs. (120 N·m) (Figure 15).

g. With the front wheels on the alignment rack turn-tables, start the engine and turn the steering wheel to the full right turn position (steering against the right steering stop).

h. Return the front wheels to the straight ahead position and then turn off the engine.

Service Procedure (Continued)

5. Use the following procedure to adjust the steering gear off-center poppet valve:

   a. Loosen the off-center poppet valve adjustment screw until 12 mm of the screw is exposed (Figure 16).

   NOTE: When loosening the off-center poppet valve adjustment screw, at about 1.5 mm, an increase in turning effort will be experienced. This increased drag is the off-center poppet valve adjusting screw being pulled out of the internal valve. The valve will be pushed back to the correct depth on the adjusting screw when the steering is cycled from lock-to-lock.

   b. Tighten the off-center poppet valve adjustment screw to 48 ft. lbs. (65 N·m) (Figure 16).

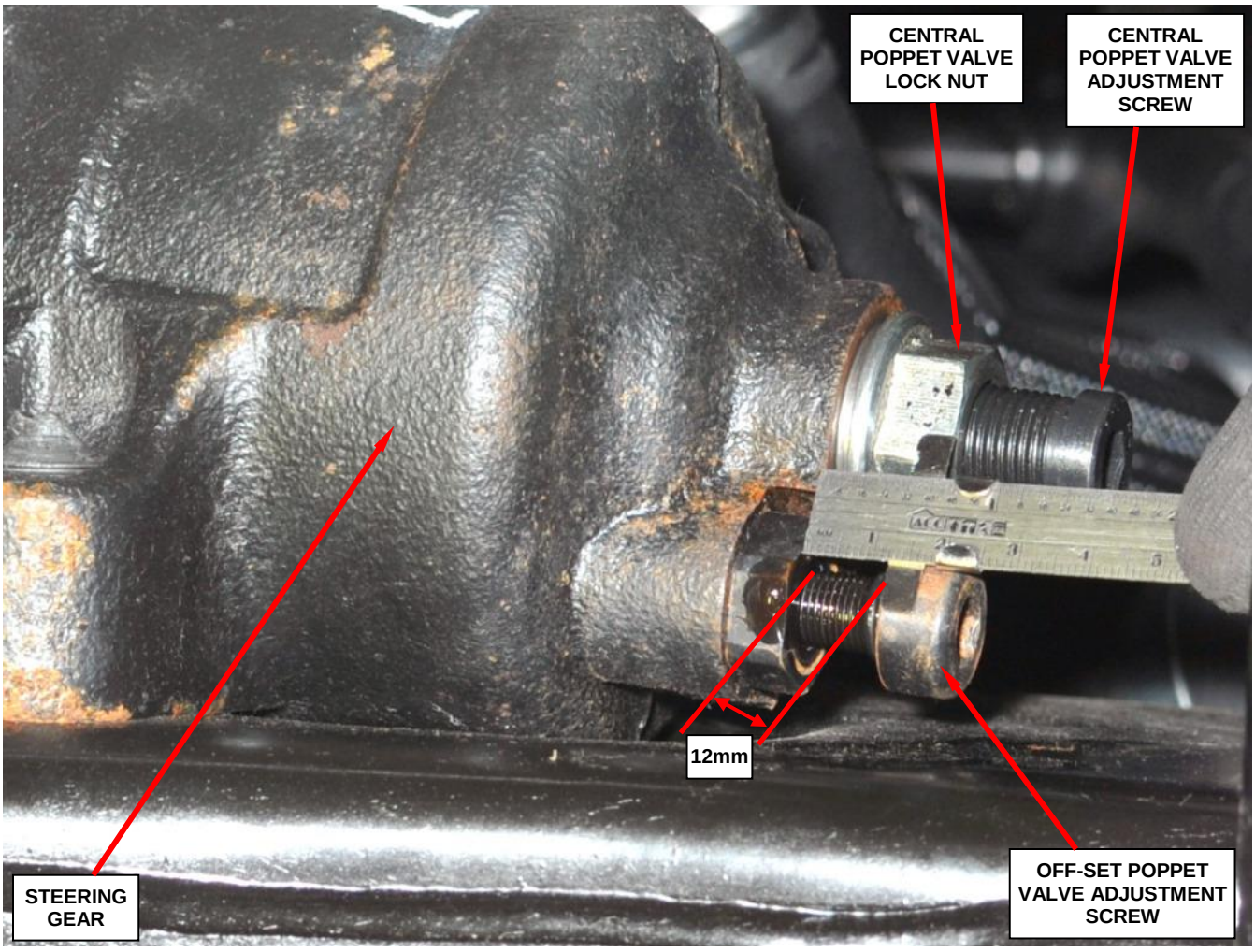

Figure 16 – Steering Gear Off-Center Poppet Valve Adjustment

Service Procedure (Continued)

6. Install the central poppet valve adjustment screw rubber protective cap (Figure 13).

7. With the front wheels on the alignment rack turn-tables, start the engine and cycle the steering wheel lock-to-lock twice and then return to the straight ahead position.

   NOTE: This will position the steering gear valves in the steering gear.

8. Remove the alignment equipment from the vehicle.

9. Check the power steering fluid level and adjust as required.

10. Road test the vehicle to ensure that the steering wheel is straight and the vehicle steers properly.

11. 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 number and time allowance:

	Labor Operation Number	Time Allowance
Replace right and left side front suspension upper control arms (equipped with gas engine)	02-R3-41-82	0.7 hours
Replace right and left side front suspension upper control arms (equipped with diesel engine)	02-R3-41-83	1.0 hours

Related Operation

Front end alignment and steering gear poppet valve adjustment (only for trucks that came in with a broken upper control arm(s))	02-R3-41-50	1.5 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.

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 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
FCA US LLC