



February 2020

Dealer Service Instructions for:

Safety Recall W01 / NHTSA 20V-042 Front Axle Bracket

Remedy Available

2020 (JL) Jeep® Wrangler

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

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 axle bracket on about 3,449 of the above vehicles may have been built with a front axle left side lower control arm bracket, that may not have been in the correct location during the welding process. An off location weld may allow the lower control arm to separate from the axle. A separation of the bracket from the axle may cause a reduction in directional control and/or allow the lower control arm bracket to hit the ground while driving. This condition could cause a crash without prior warning.

Repair

Follow section <u>A. Inspection</u> procedure below.

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that repair is required and the vehicle must be held overnight.

Parts Information

All dealers will have the parts provided to repair the vehicle when the customer care representative reviews and approves the submitted photos and determines that repair is required.

Parts Return

No parts return required for this campaign.

Special Tools

The following special tool is required to perform this repair:

▶ 9360 Separator

Inspection Procedure

A. Inspection

- 1. Raise and support the vehicle.
- 2. Take a photo image of the left side axle control arm mounting bracket (Figure 1).

IMPORTANT: Photo image <u>must</u> be clear and viewable in order to determine the quality of the weld. The images below are sample photo images that are acceptable and NOT acceptable, any photos that are out of focus or not clear may require you to provide additional photos to determine the quality of the weld.

- 3. Forward the photos and the information below to: <u>Weldinspect@dana.com</u>
 - Only one Vehicle Identification Number (VIN) per Email
 - > Enter **ONLY ONE VIN** in email subject line
 - Photos of the left axle bracket weld
 - Dealership Name, Code, Address, Contact Name, Phone Number and Email Address

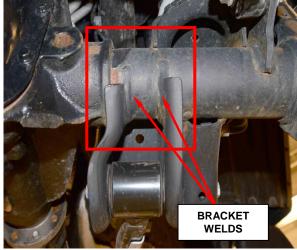


Figure 1 - Acceptable Photo



Figure 2 - NOT Acceptable Photo

Inspection Procedure [Continued]

A customer care representative will review the quality of the axle bracket weld and respond within 24 hours, with a determination of the welds are being acceptable or Front Axle replacement is required.

If the customer care representative determines that a Front Axle replacement is required, all the required repair parts will be shipped to the dealer information provided. Dealers are advised to provide a loaner vehicle to the customer if inspection determines that the vehicle must be held for repair.

Service Procedure

B. Front Axle Removal Procedure

- 1. Disconnect the negative battery cable.
- 2. Raise and support the vehicle.
- 3. Remove both front wheel and tire assemblies.
- 4. Position and secure a suitable jack to the axle.
- Remove the front driveshaft to pinion flange bolts and DISCARD (Figure 3).
- 6. Remove front driveshaft from front differential pinion and secure out of the way using a bungee or suitable strap (Figure 3).

NOTE: Do not allow the front driveshaft to hang.

7. Using a pick unlock the Tru-Lok wire harness connector, then disconnect from the axle module, and disengage the wiring harness clip from the

front axle (Figure 4).

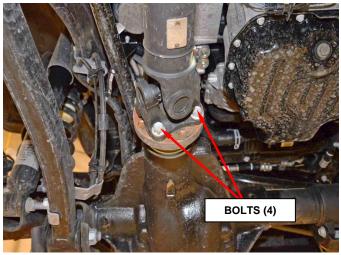


Figure 3 – Pinion Flange

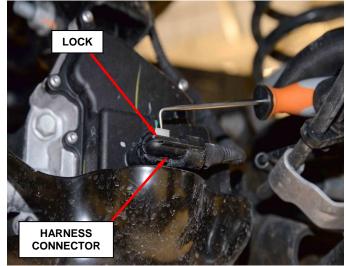


Figure 4 – Tru-Lok Electrical Connector

8. Disconnect the axle vent hose (Figure 5).

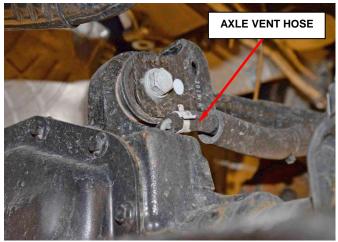


Figure 5 – Axle Vent Hose

9. Remove the front caliper adapter bolts and front calipers **as an assembly** (Figure 6).

CAUTION: Never allow the disc brake caliper to hang from the brake hose. Damage to the brake hose will result. Provide a suitable support to hang the caliper securely.

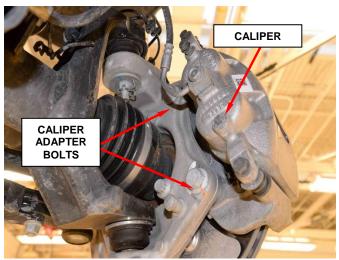
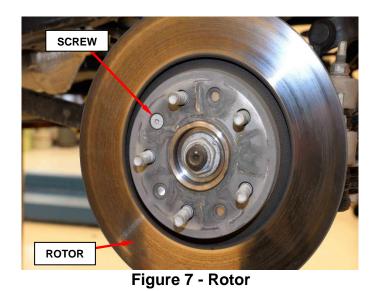


Figure 6 – Caliper Adapter

- 10. Remove the front rotor screws (Figure 7).
- 11. Remove both front brake rotors (Figure 7).



- 12. Remove the three brake rotor splash shield bolts and remove the splash shields (Figure 8).
- 13. Clean the wheel speed sensor and surrounding area with shop towel before removing the speed sensor and **DISCARD** the bolt (Figure 9).

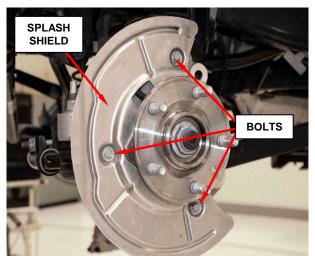


Figure 8 – Splash Shield

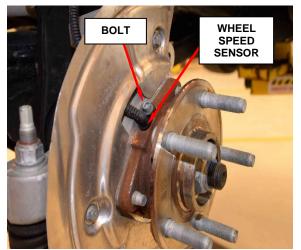


Figure 9 – Speed Sensor

- 14. Remove the brake hose mounting fastener on the coil spring pad (Figure 10).
- 15. Remove the brake hose mounting fastener on the on the steering knuckle (Figure 11).

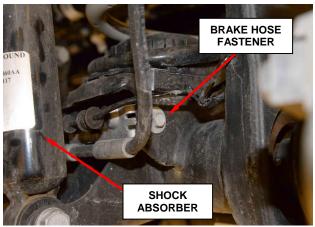


Figure 10 – Axle Fastener

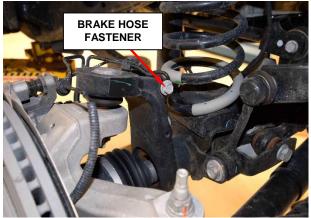


Figure 11 – Steering Knuckle Fastener

16. Remove the brake hose mounting fastener on the on the lower control arm (Figure 12).

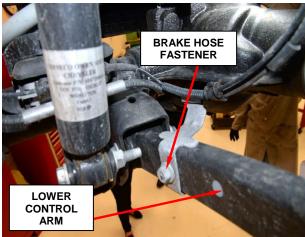


Figure 12 – Lower Control Arm

17. Remove the stabilizer bar link lower bolts and nuts (Figure 13).

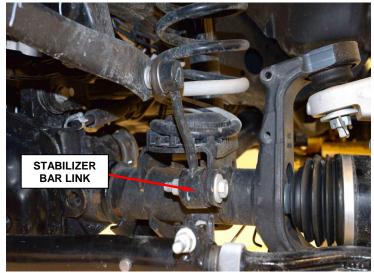
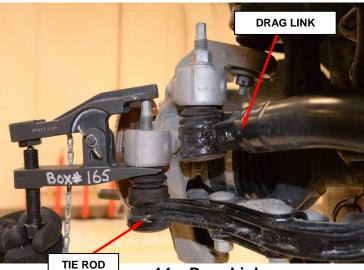


Figure 13 – Stabilizer Bar Link

- 18. Remove and **DISCARD** the right drag link outer nut (Figure 14).
- 19. Separate the drag link from the steering knuckle using special tool **9360 Separator** (Figure 14).
- 20. Remove and **DISCARD** the tie rod nuts (Figure 14).



ure 14 – Drag Link

21. Separate the tie rods from the steering knuckle using special tool **9360 Separator** (Figure 14).

22. Remove the steering damper nut and bolt from the axle bracket (Figure 15).

NOTE: Do not remove the outer (Passengers Side) steering damper fasteners.

- 23. Set the drag link assembly aside.
- 24. Remove the track bar axle bolt and flag nut from the axle bracket.
- 25. Remove upper control arms bolts and nuts from the axle brackets then move control arms from axle brackets (Figure 16).
- 26. Loosen the front lower control arm nuts on both sides (Figure 16).

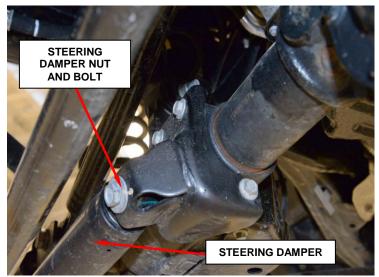


Figure 15 – Steering Damper

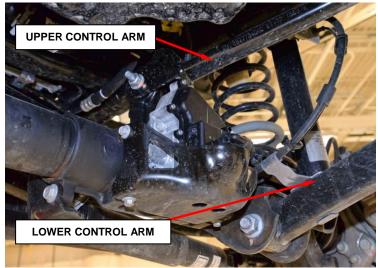


Figure 16 – Control Arms

27. Place a mark on the upper and lower coil spring Isolator, coil and coil seat, for reinstalling reference (Figure 17).

> NOTE: It is important that the Coil Springs, and Isolators are installed in their correct orientation relative to the axle, failure to install them correctly will result in premature Coil Spring damage.

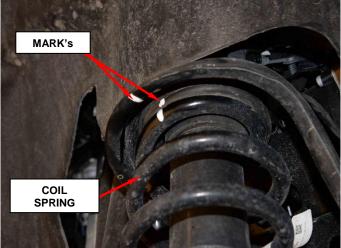


Figure 17 – Coil Spring Mark

- 28. Lower axle enough to remove coil springs from axle.
- 29. Remove lower control arm bolts (Figure 16).
- 30. Remove the lower shock absorber bolts, from the axle brackets.
- 31. Carefully lower the front axle from vehicle.
- 32. Proceed to section C. Front Axle Installation Procedure.

C. Front Axle Installation Procedure

CAUTION: The weight of the vehicle must be supported by the springs before control arms and track bar fasteners are tightened. Failure to follow these instructions will result in damage to the bushings.

- 1. Transfer the lower coil spring pads onto the **NEW** front axle.
- 2. Replace the left front lower control arm and hand start the **NEW** bolt and nut tighten to 100N⋅m plus 65° (74ft.lbs.) plus 65°.
- 3. Position and secure a suitable jack to the **NEW** front axle.
- 4. Position the **NEW** front axle under the vehicle.
- 5. Partially raise the axle.
- 6. Attach the upper control arms onto the axle (Figure 16).
- Install upper control arm bolts and nuts and tighten to 100N⋅m plus 65° (74ft.lbs.) plus 65°. (Figure 16).
- 8. Attach the lower control arms into the axle brackets (Figure 16).
- 9. Install lower control arm bolts and nuts and tighten to 100N⋅m plus 50° (74ft.lbs.) plus 50°. (Figure 16).
- 10. Install and align the coil springs to the marked upper coil pad (Figure 17).
- 11. Position the coil spring on the lower axle pad such that the spring end is resting against the isolator's spring stop.
- 12. Verify that the upper and lower spring isolators are seated properly.

NOTE: It is important that the Coil Springs, and Isolators are installed in their correct orientation relative to the axle, failure to install them correctly will result in premature Coil Spring damage.

NOTE: Observe spring as the axle is raised into position. The coil spring may catch the edge of isolator if it is not properly seated.

- 13. Raise the front axle into position until the spring seats in the upper mount.
- 14. Install shock absorbers on the axle brackets, insert the shock absorber bolt through hole and tighten to 100N·m (74ft. lbs.).

NOTE: Brake hose must be positioned in front of the shock absorber.

- 15. Install the track bar into the axle bracket.
- Install the track bar bolt and flag nut and tighten to 70 N⋅m plus 155° (52ft. lbs.) plus 155°.
- 17. Install drag link into the right steering knuckle (Figure 14).
- Install a NEW drag link nut and tighten to 40N⋅m plus 125° (59ft. lbs. plus 125°) (Figure 14).
- 19. Install the steering damper bolt through the axle bracket and start it a few threads into the flag nut (Figure 15).
- 20. Tighten the steering damper bolt and flag nut to 80N·m (59ft. lbs.).
- 21. Insert the tie rod ends into the right and left steering knuckles (Figure 14).

NOTE: Hold the end of the ball stud with a wrench when removing or installing the nuts to prevent damage to the tie rod.

- 22. Install **NEW** tie rod end nuts and tighten to $64N \cdot m$ (47ft. lbs.).
- 23. Install stabilizer bar links on axle brackets then install the nuts and tighten to 93N⋅m (69ft. lbs.) (Figure 13).

- 24. Position the brake hose to the lower control arm mounting stud and tighten the nut to18 N⋅m (13ft.lbs.) (Figure 12).
- 25. Position the brake hose bracket to the axle spring seat and install the bolt and tighten to 11 N·m (8ft.lbs.) (Figure 10).
- 26. Position the brake hose wire form to the steering knuckle and install the bolt and tighten to 25 N⋅m (18ft.lbs.) (Figure 11).

NOTE: Brake Hose wire form must be inserted into the retainer hole to lock into position.

- 27. Apply light coat of wheel bearing grease to the wheel speed sensors and insert the front wheel speed sensors in to the hub and bearing.
- 28. Install **NEW** front wheel speed sensors bolts and tighten to 7N⋅m (62In. lbs.) (Figure 9).
- 29. Install the splash shields and tighten the bolts to 11N·m (8ft. lbs.) (93In lbs.) (Figure 8).
- 30. Position the rotor over the wheel studs and against the hub (Figure 7).
- 31. Install the front rotor screw and tighten to 20N⋅m (15ft. lbs.) (177 in. lbs.) (Figure 7).
- 32. Install the front caliper adapter and front caliper assemblies (Figure 6).
- 33. Install the two caliper adapter bolts per side and tighten to 200N·m (148ft. lbs.).
- 34. Install the driveshaft with the axle flange and tighten the **NEW** bolts to 121N⋅m (89ft. lbs.) (Figure 3).
- 35. Connect the Tru-Lok wire harness connector and the axle vent hose (Figure 4 and 5).
- 36. If damaged replace the tie-strap on the Tru-Lok wiring harness.

- 37. Remove the axle support and lower the vehicle.
- 38. Install the wheel and tire assemblies and tighten the lug nuts to 176N⋅m (130ft. lbs.).
- 39. Reconnect the negative battery cable.

CAUTION: The weight of the vehicle must be supported by the springs before control arms and track bar fasteners are tightened. Failure to follow these instructions will result in damage to the bushings.

40. Perform wheel alignment.

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 paid will be used by FCA to record recall service completions and provide dealer payments.

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

	Labor Operation <u>Number</u>	Time <u>Allowance</u>
Submit Photos of Axle Bracket Weld	02-W0-11-81	0.3 hours
NOTE: Dealors are not to submit a ala	im with the chore	IOD until

NOTE: Dealers are not to submit a claim with the above LOP until a customer care representative email response is provided, indicating the vehicle does not require an axle replacement.

Submit Photos and Replace Front Axle, Lower Control Arm and perform wheel Alignment	02-W0-11-82	3.1 hours
Floor Plan Reimbursement	95-95-95-97	Calculate See Below

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Floor Plan Reimbursement

Floor Plan Reimbursement represents the vehicle's average daily allowance (see table below) multiplied by the number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop sale to the date that the remedy was made available. Note: If the vehicle was received by your dealership (KZX date) AFTER the stop sale date, you will use the KZX date instead of the stop sale date. For this Recall, the stop sale was initiated on 01/31/2020 and the remedy was made available on 02/27/2020, therefore, the number of days cannot exceed 26 days.

Vehicle	Average Daily Allowance
2020 (JL) Jeep _® Wrangler	

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.

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 This notice applies to your vehicle,

W01/NHTSA 20V-042

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

1. RECOMMENDED OPTION Call your authorized Chrysler / Dodge / Jeep_® / RAM Dealership

- 2. Call the FCA Recall Assistance Center at 1-800-853-1403. An agent can confirm part availability and help schedule an appointment
- 3. Visit recalls.mopar.com, scan the QR code below, or download the Mopar Owner's Companion App.



Get access to recall notifications, locate your nearest dealer, and more through this website or Mopar Owner's Companion App. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

DEALERSHIP INSTRUCTIONS

Please reference Safety Recall W01.

IMPORTANT SAFETY RECALL

Front Axle Bracket

Dear [Name],

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

FCA US has decided that a defect, which relates to motor vehicle safety, exists in certain [2020 (JL) Jeep_® Wrangler] vehicles.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

WHY DOES MY VEHICLE NEED REPAIRS?

Your vehicle ^[1] may have been built with a front axle left side lower control arm bracket that may not have been in the correct location during the welding process. An off location weld may allow the lower control arm to separate from the axle. A separation of the bracket from the axle, may cause a reduction in directional control and/or allow the lower control arm bracket to hit the ground while driving. **This condition could cause a crash without prior warning**.

HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA US will repair your vehicle ^[2] free of charge (parts and labor). To do this, your dealer will inspect the quality of the axle bracket weld and replace the front axle and left side lower control arm if needed. The estimated repair time is about 4 hours. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit, which may require more time. Your time is important to us, so we recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

TO SCHEDULE YOUR <u>FREE</u> REPAIR, CALL YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY

WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

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.^[3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

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

Customer Assistance/Field Operations FCA US LLC



Mr. Mrs. Customer 1234 Main Street Hometown, MI 48371

[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

[2] 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.

[3] You can also mail in 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.

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