



June 2017

Dealer Service Instructions for:

# Customer Satisfaction Notification S80 Aftermarket Dana 60 Front Axle



2007 - 2016

(JK) Jeep<sub>®</sub> Wrangler

*NOTE:* This campaign applies only to the above vehicles equipped with an Aftermarket Dana 60 Front Axle with 8 lug wheels.

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

# Subject

The aftermarket front axle steering knuckles have been machined with an incorrect taper during the manufacturing process on about 250 of the above vehicles, with approximately 80 of the axles sold by Mopar aftermarket. This condition can result in premature axle knuckle wear.

### Repair

The aftermarket front axle knuckles must be replaced with new axle knuckles for the left side and right side.

### **Parts Information**

#### Part Number Description

#### CCAGS801AA Axle Knuckle Service Kit

Each package contains the following components:

<u>Quantity</u>	<b>Description</b>
1	Knuckle, Right Side
1	Knuckle, Left Side
2	Nut, Upper Ball Joint
2	Pin, Cotter
2	Lock Nut, Lower Ball Joint
3	Nylock Nut, Tie Rod/Steering Link
12	Nut, Lock Hub
2	Bolt, Steering limit
2	Nut, Steering limit jam

#### 04874469 Gear & Axle Lubricant (SAE 75W-140) (API GL-5) MOPAR

Due to the unique list of affected axles (by serial number), the following steps will be needed to determine if the steering knuckle service kit will be required.

1. Dealership should obtain serial number from customer's vehicles. The serial number tag can be found on the top of the front axle (Figure 1).



Figure 1 – Front Axle Tag

- 2. The dealership should contact DANA via email (UD60CSP@Dana.com) with the following information:
  - a. Dealer name, address, and dealer code
  - b. Contact name and phone number
  - c. VIN and axle serial number
- **3.** Dana will validate the axle serial number supplied and respond within approximately 24 hours with the disposition on the axle repair.
- 4. If required, the dealership must then place the order for the specified part through normal means using an "E" order type. If an "S" order type is placed, it will count against your special handling allowance. Shipment will arrive directly from the supplier (SSD), there will be no shipping or special handling charges to the dealership.

5. Dealers should confirm part has arrived before customer comes in for their service visit.

**NOTE:** Dealer should include the last 6 digits of the VIN in the "Order Number" field when placing the order.

# **Parts Return**

This campaign part will be subject to **parts return.** Please make sure to return parts in the **original shipping box** and attach the **provided prepaid return label to box**.

# **Special Tools**

The following special tools are required to perform this repair:

≻ C4150A

Puller, Ball Joint

▶ 9360

Seperator, Ball Joint

# Service Procedure

- 1. Raise and support the vehicle.
- 2. Remove both front tire and wheel assemblies.
- 3. Remove the caliper adapter bolts on both sides and save (Figure 2).

<u>NOTE:</u> Support the disc brake caliper; do not let it hang by the brake hose.

4. Remove the disc brake rotor.



Figure 2 - Caliper

NOTE: May have to use a rubber mallet to loosen rotor from hub.

## **Service Procedure (Continued)**

- 5. Remove the three splash shield bolts and save.
- 6. Remove the six hub nuts and washers and **discard** (Figure 3).



Figure 3 – Hub Nuts

CAUTION: Use care when removing the hub nuts and washers, damaged may occur to the ABS tone wheel during the nut removing procedure.

- 7. Remove the wheel speed sensor mounting bolt and save.
- 8. Remove the wheel speed sensor; make sure "O" ring is still attached to the sensor (Figure 4).



Figure 4 – Wheel Speed Sensor

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# Service Procedure (Continued)

9. Remove Axle shaft assembly, using moderate force; pry in location shown (Figure 5, and 6).



Figure 5 – Axle Shaft



Figure 6 – Axle Shaft Right Side

NOTE: Spray rust penetrant on back of hub and near the front hub studs to assist axle shaft removal.

**NOTE:** Place drain pan under the front axle to contain axle lube draining from axle.

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### **Service Procedure (Continued)**

- 10. Remove the tie rod end nuts and discard.
- 11. Disconnect the tie rod end from the steering knuckle using Miller Tool 9360 or equivalent (Figure 7).
- 12. Remove the steering link nut and discard right side only (Figure 8).



Figure 7 – Miller Tool 9360

Figure 8 – Right Side

- 13. Disconnect the steering link end from the steering knuckle using Miller Tool 9360 or equivalent (Figure 8).
- 14. Remove the upper ball joint cotter pin and partially loosen the nut to hold knuckle in place.
- 15. Remove the lower ball joint nut and discard.

### **Service Procedure (Continued)**

16. Separate the upper ball joint from the knuckle using special tool C4150A Puller, once separated remove the upper ball joint nut and **discard** (Figure 9).

> NOTE: The lower ball joint will typically separate at the same time as the upper.



Figure 9 – Upper Ball Joint

17. Remove the knuckle from the vehicle, and measure the steering stop limit bolt height (Figure 10).

18. Install the **NEW** supplied steering stop limit bolt and jam nut, and adjust to the same height as measured on the removed knuckle, then tighten the jam nut.



Figure 10 - Steering Stop Bolt

### **Service Procedure (Continued)**

19. Install the **NEW** knuckle on to the lower and upper ball joint studs and hand start both upper and lower ball joint with the **NEW** supplied nuts (Figure 11, and 12).



- 20. Complete the following tightening sequence below;
  - a. Tighten the *lower* ball joint nut to 60 ft. lbs. (81 N·m) to insure proper taper lock.
  - b. Tighten the *upper* ball joint nut to 70 ft. lbs. (94 N·m); then advance to the next castle nut opening to line up with hole on ball joint, then install the cotter pin.
  - c. Tighten the *lower* ball joint nut to 160 ft. lbs. (217 N·m).
- 21. Install the tie rod end into the **NEW** axle knuckle and hand start the **NEW** nut.

NOTE: The kit includes nuts for the stock tie rods; if the vehicle no longer has stock tie rods, and the nuts provided are not appropriate, other action may be required.

22. Tighten the **NEW** tie rod nut to 55 ft. lbs. (75 N $\cdot$ m).

### **Service Procedure (Continued)**

- 23. Install the steering link into the **NEW** axle knuckle and hand start the **NEW** nut **Right Side Only.**
- 24. Tighten the **NEW** steering link nut to 55ft. lbs. (75 N·m).
- 25. Insert the axle shaft through the **NEW** axle knuckle into the axle assembly ensuring the spindle is fully seated onto the **NEW** knuckle studs, and the hub flange flat is facing the rear of vehicle; wipe any lube residue off from the axle housing (Figure 13).



Figure 13 – Hub Flange

- 26. Install the six **NEW** nuts and washers onto the hub studs (Figure 14).
- 27. Tighten the axle stud nuts to 63ft. lbs. (85 N·m).

CAUTION: Use care when tightening the hub nuts and washers, damaged may occur to the ABS tone wheel during the nut tightening procedure.



Figure 14 – Knuckle Assembly

- 28. Install the wheel speed sensor apply appropriate lube to assist installation, verify the "O" ring is in place and no debris is on the sensor.
- 29. Install and tighten the wheel speed sensor bolt to 79 in. lbs. (9  $N \cdot m$ ).

### **Service Procedure (Continued)**

- 30. Install the splash shield using the three original screws.
- 31. Tighten the three splash shield screws to 89 in. lbs (10  $N \cdot m$ ).
- 32. Install the disc brake rotor onto the hub.
- 33. Install the disc brake caliper and tighten the caliper adaptor mounting bolts to 295 ft. lbs. (400 N⋅m).
- 34. Remove the front axle lube fill plug, and check lube level, add if necessary (Figure 15).
- 35. Install fill plug and tighten to 20 ft. lbs. (27 N⋅m).
- 36. Install the tire and the wheel assemblies.



Figure 15 – Front Axle

- 37. Lower the vehicle and depress brake pedal several times to adjust caliper brake pads.
- 38. Road test vehicle.
- 39. 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 Customer Satisfaction Notification 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>
Inspect Axle Serial Number	02-S8-01-81	0.2 hours
Replace Front Axle Knuckles	02-S8-01-82	1.9 hours

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

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete 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 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 campaign launch, those with a phone number, city, zip code, or VIN sequence.

**Dealers should 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.

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 notification 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 Service / Field Operations FCA US LLC

#### This notice applies to your vehicle,

**S80** 



3. Visit our Recall Website, recalls.mopar.com or scan below.



You can find your nearest dealer and review all your scheduling options from this website. 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 CSN S80

**CUSTOMER SATISFACTION NOTIFICATION** 

#### Aftermarket DANA 60 Front Axle

#### Dear [Name],

At FCA US LLC, we recognize that the success of our business depends on the satisfaction of our customers. We are constantly monitoring the quality of our products and looking for opportunities to improve our vehicles even after they are sold. Because your long-term satisfaction is important to us, we are contacting you on important improvements we would like to make to your vehicle <sup>[1]</sup>. This will be done at no charge to you.

We are recommending the following improvements be performed on certain [2007-2016 Jeep® Wrangler] vehicles equipped with an DANA 60 aftermarket front axle with 8 lug wheels.

#### WHY DOES MY VEHICLE NEED REPAIRS?

The aftermarket front axle knuckles on your vehicle were machined with an incorrect taper. This condition can result in premature axle knuckle wear.

#### HOW DO I RESOLVE THIS CUSTOMER SATISFACTION NOTIFICATION

FCA will repair your vehicle <sup>[2]</sup> free of charge (parts and labor). To do this, your dealer will replace both front aftermarket axle knuckles. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit. Your time is important to us; please be aware that these steps may require more time. The estimated repair time is 2 hours. We recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

#### TO SCHEDULE YOUR FREE REPAIR CALL 1-800-853-1403 OR 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.<sup>[3]</sup> 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 Fiat Chrysler Automobiles 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.