



August 2019

Dealer Service Instructions for:

Safety Recall V63 / NHTSA 19V-449 Acceleration Sensors

Remedy Available

2019 (KL) Jeep® Cherokee

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 Occupant Restraint Controller (ORC) on about 41,100 of the above vehicles may lose communication between one or more of the acceleration sensors. This may result in a diminished capability of the air bag system to properly detect certain crash events which may result in degraded inflator outputs, late air bag deployment, or a failure to deploy. If an acceleration sensor loses communication with the ORC, the air bag warning lamp will illuminate in the instrument panel indicating a malfunction in the occupant restraint system. If this warning is not heeded, this condition may increase the risk of injury to vehicle occupants in the event of a crash.

Repair

Replace the affected acceleration sensors (impact sensors).

Parts Information

Part Number

Description

CSFKV631AA Kit, Accelerator Sensors

Each package contains the following components:

Quantity Description

- 2 Sensor, Accelerator (Engine compartment) (974AA)
- 4 Sensor, Accelerator (B and C-Pillars) (975AA)

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools are required to perform this repair:

- ▹ NPN wiTECH micro pod II
- NPN Laptop Computer
- > NPN wiTECH Software

Service Procedure

A. Replace Front Impact Sensors

WARNING: To avoid serious or fatal injury on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before attempting any steering wheel, steering column, airbag, Occupant Classification System (OCS), seat belt tensioner, impact sensor or instrument panel component diagnosis or service. Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing further diagnosis or service. This is the only sure way to disable the SRS. Failure to follow these instructions may result in accidental airbag deployment.

WARNING: To avoid serious or fatal injury, never strike or drop the front impact sensor, as it can damage the impact sensor or affect its calibration. The front impact sensor enables the system to deploy the front supplemental restraints. If an impact sensor is accidentally dropped during service, the sensor must be scrapped and replaced with a new unit. Failure to observe this warning could result in accidental, incomplete, or improper front supplemental restraint deployment.

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Service Procedure [Continued]

NOTE: The front and the side impact sensors are NOT interchangeable.

- 1. Adjust the driver and passenger side front seats to the most forward position for easiest access to the B-pillar trim for section B.
- 2. Disconnect isolate and the negative battery cable. If equipped with an Intelligent Battery Sensor disconnect the IBS (IBS). first before connector disconnecting the negative battery cable. Wait two minutes for the system capacitor to discharge before continuing service (Figure 1).



Figure 1 – Battery Negative

- 3. For the right impact sensor if equipped with 2.4L only, remove the engine air cleaner resonator from the right side of the engine compartment.
 - a. Remove the two screws (Figure 2).
 - b. Remove the bolt (Figure 2).
 - c. Remove the resonator (Figure 2).



Figure 2 – Air Cleaner Resonator

- 4. Locate the front impact sensors mounted on the engine compartment side of the Front End Module (FEM) carrier, below the upper radiator cross member and just outboard of the cooling module (Figure 3).
- 5. Disconnect the FEM wire harness connectors from both right and left front impact sensors.
- 6. Remove the bolts that secure the sensors to the back of the FEM carrier.
- 7. Gently pry the sensor away from the FEM carrier far enough to disengage the latch feature of the locator pin on the back of the sensor from the locator hole in the FEM carrier.
- 8. Remove and **DISCARD** the front impact sensors from the vehicle.



Figure 3 – Front Impact Sensors

NOTE: The front and the side impact sensors are NOT interchangeable. Front impact sensors are identified with the letter F. Side impact sensors are identified with the letter S (Figure 4)

- 9. Position the **NEW** right and left front impact sensors to the back of the Front End Module (FEM) carrier just outboard of the cooling module.
- 10. Be certain to engage the locating pin integral to the back of the sensor into the locating hole in the FEM carrier.
- 11. Install the bolts that secure the **NEW** right and left sensors. Tighten the bolts to $9 \text{ N} \cdot \text{m}$ (80 in. lbs.).
- 12. Connect the FEM wire harness connectors to the impact sensors.



Figure 4 – Impact Sensor Identification

- 13. For the right impact sensor if equipped with 2.4L only, install the engine air cleaner resonator.
 - a. Position the resonator between the air inlet tube and the air cleaner body.
 - b. Install the bolt and tighten to 9 N \cdot m (80 in. lbs.).
 - c. Install and securely tighten the two screws.
- 14. Do not connect the negative battery cable at this time. <u>Continue to Section B.</u> <u>Replace Side B-Pillar Impact Sensors.</u>

B. Replace Side B-Pillar Impact Sensors

NOTE: Left side shown, right side similar.

- 1. Starting on the left side, remove the trim from the inside of the B-pillar.
 - a. Using a small flat bladed tool or equivalent, remove the trim cap (Figure 5).
 - b. Remove the screw.
 - c. Using C-4755 or equivalent, pry the upper portion of the B-pillar trim to disengage the retaining clips. Seat belt remains routed through B-pillar trim.
 - d. Remove the upper B-pillar trim and position to the side (Figure 5).



Figure 5 – B-Pillar Trim

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- e. Using a trim stick or equivalent, remove the instrument panel end cap (Figure 6).
- f. Using a trim stick or equivalent, remove the A-pillar extension (Figure 6).
- g. Using a trim stick and equivalent, disengage the retaining clips securing the front door sill scuff panel to the door sill and lower B-pillar (Figure 6).
- h. Remove the front door sill scuff panel (Figure 6).



Figure 6 – Front Door Trim

- i. Using a trim stick or equivalent, disengage the retaining clips securing the rear door sill scuff panel (Figure 7).
- j. Remove the rear door sill scuff panel (Figure 7).
- k. Using a trim stick, pry the upper portion of the lower B-pillar trim to disengage the retaining clips (Figure 8).
- CER DOOR SCUFF PANEL

Figure 7 – Rear Door Scuff Panel

1. Using trim stick, pry up on the lower portion of the B-pillar trim and position to the side for access to the sensor (Figure 8).



Figure 8 – B-Pillar Lower Trim

- 2. Disconnect the body wire harness connector from the side impact sensor (Figure 9).
- 3. Remove the nut that secures the sensor to the weld stud on the lower B-pillar (Figure 9).
- 4. Gently pry the sensor away from the inner B-pillar far enough to disengage the latch feature of the locator pin from the locator hole (Figure 9).
- 5. Remove and **DISCARD** the impact sensor from the inner B-pillar.



Figure 9 – B-Pillar Impact Sensor

NOTE: The front and the side impact sensors are NOT interchangeable. Front impact sensors are identified with the letter F. Side impact sensors are identified with the letter S (Figure 4).

- 6. Position the **NEW** side impact sensor to the weld stud on the inner B-pillar. Be certain that the locator pin on the sensor is fully engaged in the locator hole of the inner B-pillar.
- 7. Install the nut that secures the sensor to the inner B-pillar. Tighten the nut to $11 \text{ N} \cdot \text{m}$ (8 ft. lbs.).
- 8. Connect the body wire harness connector to the sensor.
- 9. Position the lower portion of the upper B-pillar trim and hand tap to engage the retaining clips.

- 10. Align and position the lower B-pillar trim, hand tap to engage the retaining clips.
- 11. Install the upper B-pillar trim.
- 12. Install the upper screw and seat the trim cap fully.
- 13. Position the front door sill scuff panel.
- 14. Hand tap to engage the retaining clips securing the front door sill scuff panel to the door sill and lower B-pillar.
- 15. Install the instrument panel A-pillar extension.
- 16. Install the instrument panel end cap.
- 17. Hand tap to engage the retaining clips securing the front door sill scuff panel to the door sill, lower B-pillar and lower C-pillar.
- 18. Repeat step 1 through **17** for the <u>right side impact sensor</u>.
- 19. Do not connect the negative battery cable at this time. <u>Continue to Section C.</u> <u>Replace Side C-Pillar Impact Sensors.</u>

C. Replace Side C-Pillar Impact Sensors

- 1. Open the liftgate and remove the load floor lid.
- 2. If equipped, remove the two load floor storage bins.
- 3. If equipped with second row sliding rear seats, fold down the seats and slide both seats to full forward position.
- 4. If equipped with a rear fixed bench seat, fold the seats forward. Firmly lift at each end of the cover panel and remove the panel (Figure 10).
- 5. Using trim stick C-4755 or equivalent, separate the retaining clips and remove the liftgate scuff plate (Figure 10).



Figure 10 – Cover Panel and Scuff Plate

- 6. Remove the two screws from load floor front panel (Figure 11).
 - a. Remove the push fasteners from the 40% seat back flap, fixed bench seat only (Figure 11).
 - b. Remove the push fasteners from the 60% seat back flap, fixed bench seat only (Figure 11).
- 7. Remove the load floor front panel (Figure 11).



Figure 11 – Load Floor Front Panel

- 8. If equipped with second row fixed bench seat the rear seat backs must be removed to remove quarter trim.
 - a. Raise the seat backs in the upright position, then remove the pivot bracket cover (3) from the front side of the seat (Figure 12).
 - b. Fold the seats forward.
 - c. Remove the bolt (1), then push the pivot bracket (2) forward and remove (Figure 12).

d. Using a trim tool, release both outboard pivot covers (1) by prying inward, then pull forward to remove (Figure 13).



Figure 12 – Pivot Bracket and Cover



Figure 13 – Outboard Pivot Covers

e. Using a pry tool (4), pry the locking bushing (2) inward then lift the seat back (1) out of the slot (3) and remove the seat back. Repeat on other side (Figure 14).

NOTE Left side shown, right side similar. Repeat required steps 9 through 32 for right side impact sensor replacement

before installing the rear seat backs.

- 9. Starting on the left side, remove the upper trim from the inside the C-pillar (Figure 15).
 - a. Using a small flat bladed tool or equivalent, open the trim cap (Figure 15).
 - Remove the screw.
 Magnetic screwdriver bit is recommended to avoid dropping the screw behind the trim panel.



Figure 14 – Seat Back Locking Bushing



Figure 15 – Upper Trim

c. Remove the rear seat belt retractor cover, if equipped (Figure 16).

d. Position the door seal aside.



Figure 16 – Seat Belt Retractor Cover

- e. Using a trim stick C-4755 or equivalent, disengage the retaining fasteners that secure the quarter trim panel to the quarter panel (Figure 17).
- f. Pull the quarter trim panel away from the quarter panel (Figure 17).
- g. Remove the quarter trim panel and position to the side.



Figure 17 – Rear Quarter Trim (Upper)

- 10. Position the door seal aside.
- 11. Remove the cargo lamp and disconnect the wire harness (Figure 18).
- 12. Remove the two fasteners for the cargo loops (Figure 18).
- 13. Remove the button fastener (Figure 18).
- 14. Using a trim stick C-4755 or equivalent, disengage the retaining fasteners that secure the quarter trim panel to the quarter panel and pull the quarter trim panel away from the quarter panel (Figure 18).
- 15. Disconnect the electrical connectors and remove the quarter trim panel.



Figure 18 – Quarter Trim Panel (Lower)

- 16. Disconnect the body wire harness connector from the side impact sensor (Figure 19).
- 17. Remove the nut that secures the sensor to the weld stud on the inner C-pillar (Figure 19).
- Gently pry the sensor away from the inner C-pillar far enough to disengage the latch feature of the locator pin from the locator hole (Figure 19).
- 19. Remove and **DISCARD** the impact sensor from the inner C-pillar.

NOTE: The front and the side impact sensors are NOT interchangeable. Front impact sensors are identified with the letter F. Side impact sensors are identified with the letter S (Figure 4).



Figure 19 – C-Pillar Impact Sensor

- 20. Position the **NEW** side impact sensor to the weld stud on the inner C-pillar. Be certain that the locator pin on the sensor is fully engaged in the locator hole of the inner C-pillar.
- 21. Install the nut that secures the sensor to the inner C-pillar. Tighten the nut to $11 \text{ N} \cdot \text{m}$ (8 ft. lbs.).
- 22. Connect the body wire harness connector to the sensor.

- 23. Position the quarter trim panel back into the vehicle.
- 24. Position the front locating pin into the body and seat the push pin near the location pin fully.
- 25. Seat the clip at the top of the trim panel into the C-pillar first.
- 26. Seat the push pin at the rear of the quarter glass.
- 27. Connect electrical connectors.
- 28. Position the rear locating pin into the body and seat the remaining push pins.
- 29. Install the fasteners and the cargo loops and tighten to 8 N·m (71 in. lbs.).
- 30. Install the button fastener and tighten securely.
- 31. Install the rear cargo lamp.
- 32. Position the door seal back fully.
- 33. If equipped with second row sliding seat, position seat in full upright and rearward position.

- 34. If equipped with second row fixed bench seat, install rear seat backs.
 - a. Install the seat back into the slot and at the center seat pivot bracket.

NOTE: A pry tool may be helpful to pry the locking bushing inward.

- b. Install both seat back locking bushings into the pivot brackets.
- c. Install both outboard pivot covers.
- d. Install the pivot brackets and the bolt. Tighten the rear seat pivot bracket bolt to 25 N⋅m (18 ft. lbs.).
- e. Install the pivot bracket cover.
- f. Install the front load floor support panel.
- g. Install the screws and tighten securely.
- h. Install the four push fasteners for the 60% seat back flap, if equipped.
- i. Install the four push fasteners for the 40% seat back flap, if equipped.
- j. Install the cover panel.
- 35. Position the upper quarter trim back in place and seat the retaining clips fully.
- 36. Install the upper screw and seat the trim cap fully.
- 37. Install the rear door scuff plates.
- 38. Position the liftgate scuff plate back into the vehicle and seat the retaining clips fully.
- 39. Install the cargo storage bins and the load floor lid, if equipped.
- 40. Do not connect the negative battery cable at this time. <u>Continue to Section</u> <u>D. Supplemental Restraint System (SRS) Verification Test.</u>

D. Supplemental Restraint System (SRS) Verification Test

- 1. During the following test, the negative battery cable remains disconnected and isolated, as it was during the SRS component removal and installation procedures until instructed to do otherwise.
- 2. Be certain that the diagnostic scan tool contains the latest version of the proper diagnostic software. Connect the scan tool to the 16-way Data Link Connector (DLC). The DLC is located on the driver side lower edge of the instrument panel, near the steering column opening cover and outboard of the steering column.
- 3. Remove and save the two ORC/Airbag fuses (F96 and F97) in the Power Distribution Center which is located in the engine compartment near the battery.
- 4. For vehicles equipped with a keyed ignition switch, turn the ignition switch to the "ON" position and exit the vehicle then **continue with Step 6**.
- 5. For vehicles equipped with keyless ignition node, check to be certain that nobody is in the vehicle then connect the battery negative cable(s). If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector. Turn the ignition switch to the "ON" position then **continue with Step 7**.
- 6. Check to be certain that nobody is in the vehicle, then connect the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector.
- 7. Install the two ORC/Airbag fuses in the Power Distribution Center.
- 8. Open the wiTECH Diagnostic application.

- 9. Starting at the "Select Tool" screen, select the row/tool for the wiPOD device you are using, then select "Next".
- 10. Enter your "User id" and "Password", then select "Finish".
- 11. Clear all DTC's in all modules using the wiTECH.
- 12. Transition the status of the ignition switch to **OFF** for about 15 seconds, and then back to **ON**. Observe the airbag indicator in the instrument cluster. It should light from four to six seconds, and then go out. This indicates that the SRS is functioning normally and that the repairs are complete. If the airbag indicator fails to light, or lights and stays ON, there is still an active SRS fault or malfunction. Refer to the appropriate diagnostic information to diagnose the problem.
- 13. Close the hood and remove the wiTECH micro pod II.
- 14. 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 paid 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 <u>Number</u>	Time <u>Allowance</u>
Replace Impact Sensors	08-V6-31-82	1.3 hours
Optional Equipment		
Equipped with Fixed Rear Bench Seat (Without Sales Code CAYS - Fore/Aft		
Adjusting 2nd Row Seat))	08-V6-31-60	0.3 hours
Floor Plan Reimbursement	95-95-95-97	Calculate See Below

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 06/20/2019 and the remedy was made available on 08/06/2019, therefore, the number of days cannot exceed 47 days.

Vehicle	Average Daily Allowance
2019 Jeep Cherokee	

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,

V63/NHTSA 19V-449

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 V63.

IMPORTANT SAFETY RECALL

Acceleration Sensors

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 [2019 Model Year Jeep_® Cherokee (KL)] 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?

The Occupant Restraint Controller (ORC) on your vehicle ^[1] may lose communication between one or more of the acceleration sensors which may result in a diminished capability of the air bag system to properly detect certain crash events which may result in degraded inflator outputs, late air bag deployment, or a failure to deploy. If an acceleration sensor loses communication with the ORC, the air bag warning lamp will illuminate in the instrument panel indicating a malfunction in the occupant restraint system. If this warning is not heeded, this condition may increase the risk of injury to vehicle occupants in the event of a crash.

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 replace the affected sensors. The estimated repair time is two 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.