



December 2015

Dealer Service Instructions for:

Safety Recall R39 / NHTSA 15V-509

Body Control Module

Models

2014 (KL) Jeep® Cherokee

NOTE: This recall applies only to the above vehicles equipped with Left Hand Drive built from January 04, 2013 (MDH 010405) through July 11, 2014 (MDH 071113).

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

Subject

The windshield wiper system on about 158,600 of the above vehicles may develop static electricity build-up. As a result, an Electro-Static Discharge (ESD) in the wiper system could feed back into the Body Control Module (BCM) internal electronics and cause the BCM to fail. A failed BCM could cause the windshield wiper to stop functioning without warning. Operating the vehicle without windshield wipers under certain driving conditions could limit the driver's view and cause a crash.

Repair

All vehicles must be inspected for front wiper functionality. Vehicles found with non-functioning wiper system and Diagnostic Trouble Code B2349 must have the Body Control Module (BCM) replaced.

Also a windshield wiper linkage ground strap will be installed to the windshield wiper linkage module on all involved vehicles.

Parts Information**Part Number****Description****CBR2R391AB****Ground Strap Package**

Each package contains the following components:

Quantity**Description**

1

Strap, Ground

1

Bolt

68141881AI**Module, Body Control
(with Sales Code LM2)****68141880AI****Module, Body Control
(with Sales Code LMC and Sales Code LNJ)****68141879AI****Module, Body Control
(with Sales Code LMC and without Sales Code
LNJ)**

NOTE: The Body Control Module failure rate is estimated to be fewer than 2,000 globally.

Part Number**Description****68065586AA****Tape, Tesa (one roll services 40 vehicles)**

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools are required to perform this repair:

- NPN wiTECH VCI Pod Kit
- NPN Laptop Computer
- NPN wiTECH Software

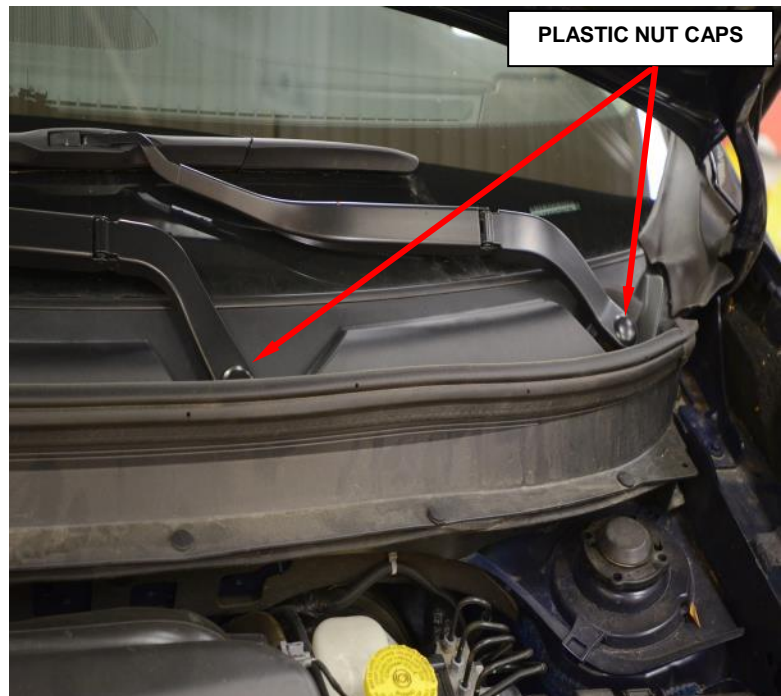
Service Procedure**A. Inspect Wiper System**

NOTE: The wiTECH scan tool must be used to perform this recall. The wiTECH software is required to be at the latest release level before performing this procedure.

1. Place the ignition in the “**RUN**” position.
2. Turn the front wipers to the “**LOW**” position.
 - If the wipers cycle at Low speed, continue with **Section B. Install Ground Strap.**
 - If the wipers **do not** cycle at Low speed, continue with **Step 3.**
3. Connect the wiTECH VCI pod to the vehicle data link connector.
4. Open the wiTECH Diagnostic application.
5. Starting at the “Select Tool” screen, highlight the row/tool for the wiPOD device you are using. Then select “**Next**” at bottom right side of the screen.
6. Enter your “**User id**” and “**Password**”, then select “**Finish**” at the bottom of the screen.
7. From the “**Vehicle View**” screen, click on the **BCM** icon.
8. Using the wiTECH check for active DTC’s.
 - If **B2349** code is present the **BCM must be replaced**, continue with **Section B. Install Ground Strap.**
 - If **B2349** code is **not present**, refer to all current, normal diagnostics published in DealerCONNECT/TechCONNECT and repair as necessary following normal warranty repair guidelines then continue with **Section B. Install Ground Strap.**

Service Procedure (Continued)**B. Install Ground Strap**

1. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
2. Remove the right and left fender to cowl muckets by pulling up at the end of the fender to cowl mucket to cowl panel joint and then pulling the fender to cowl mucket out of the fender (Figure 1).
3. If equipped, remove the driver's side wiper cover by pulling up on the cover.
4. Use the following steps to remove both front wiper arms from the wiper pivots.
 - a. Carefully pry the plastic nut caps off of the pivot end of the wiper arms (Figure 2).
 - b. Remove the nuts that secure the wiper arms to the wiper pivot shafts.

**Figure 1 – Fender to Cowl Mucket (Left Side Shown)****Figure 2 – Wiper Pivot Shaft Nut Caps**

Service Procedure Continued

- c. Lift the front wiper arm to its over-center position to hold the wiper blade off of the glass and relieve the spring tension on the wiper arm to pivot shaft connection.
- d. Use a slight rocking action to disengage the front wiper arm pivot end from the pivot shaft and remove the wiper arm.

CAUTION: The use of a battery terminal puller or equivalent when removing the front wiper arm is NOT recommended except as a last resort, as this may damage the front wiper arm.

- 5. Use the following steps to remove the cowl panel.
 - a. With the use of C-4755 or equivalent, remove the six push pins attaching the cowl panel to the cowl plenum extension (Figure 3).

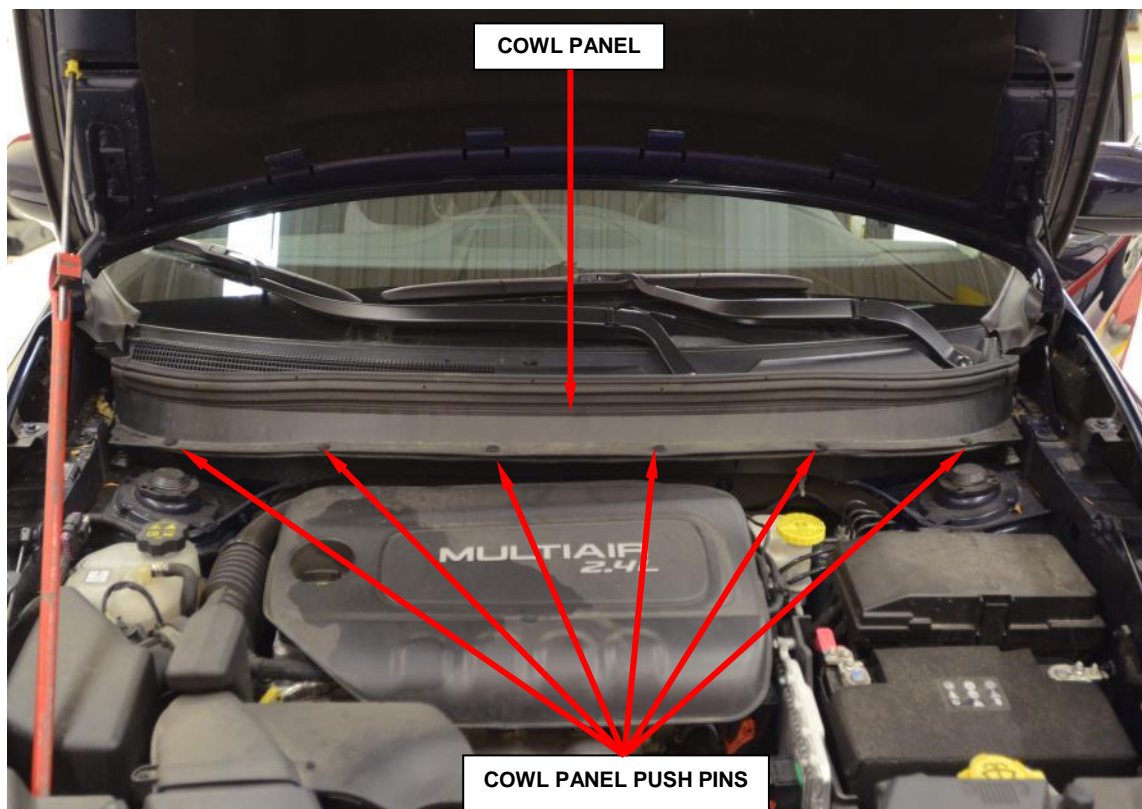


Figure 3 – Cowl Panel Push Pins

Service Procedure Continued

CAUTION: Use care when removing the cowl screen from the retainer on the windshield. If the retainer on the windshield is broken/damaged the windshield will require replacement.

- b. Starting at the driver's side pull up on the back edge of the cowl panel and work cross car to release the tab from the backside of the cowl panel from the groove in the lower windshield channel (Figure 4).
 - c. Remove the cowl panel cover from vehicle (Figure 4).
6. Use the following steps to install the windshield wiper linkage ground strap.
- a. Using Tesa tape, wrap the ground strap from the crimped end of the eyelet terminal to the crimped end of the edge biter clip (Figure 5).

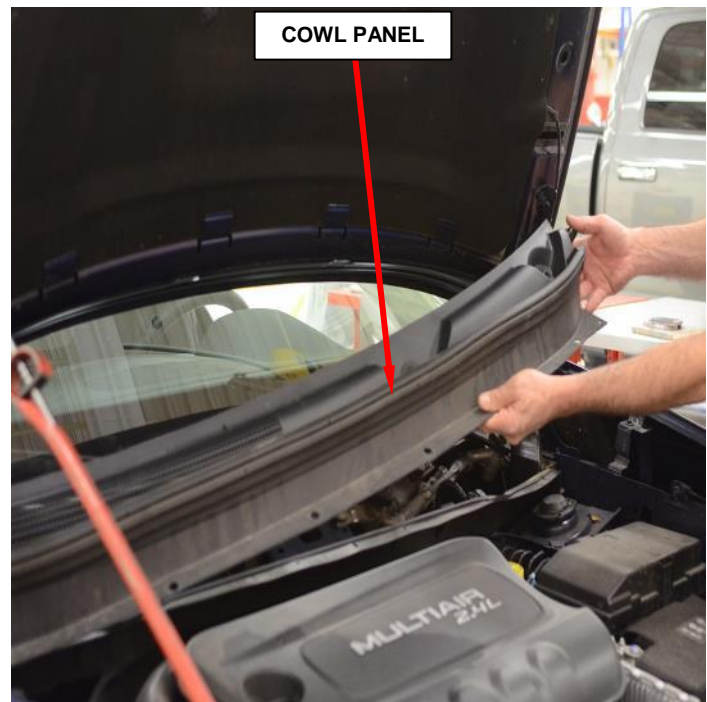


Figure 4 – Cowl Panel

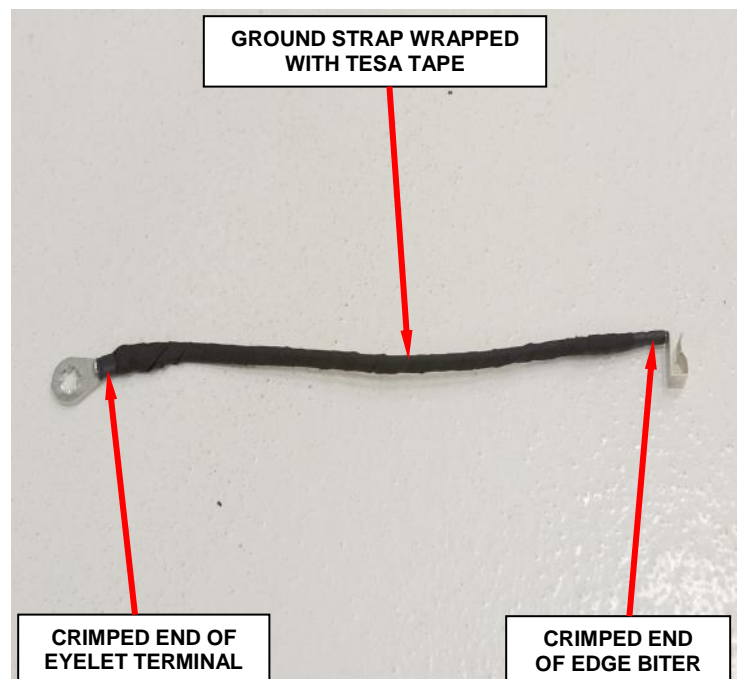


Figure 5 – Tesa Tape Wrap

Service Procedure Continued

- b. Secure the ground strap eyelet to the center support using the supplied bolt and tighten to 49 in. lbs. (5.5 N·m) (Figure 6).

NOTE: Ensure that the wire and ground strap eyelet are oriented as shown in Figure 6 and the eyelet does not rotate from the 5 o'clock position when the bolt is tightened.

- c. Install the edge biter clip as shown to the rear edge of the wiper bracket, 45mm from the center of the wiper bracket mounting bolt to the edge biter clip (Figure 6).

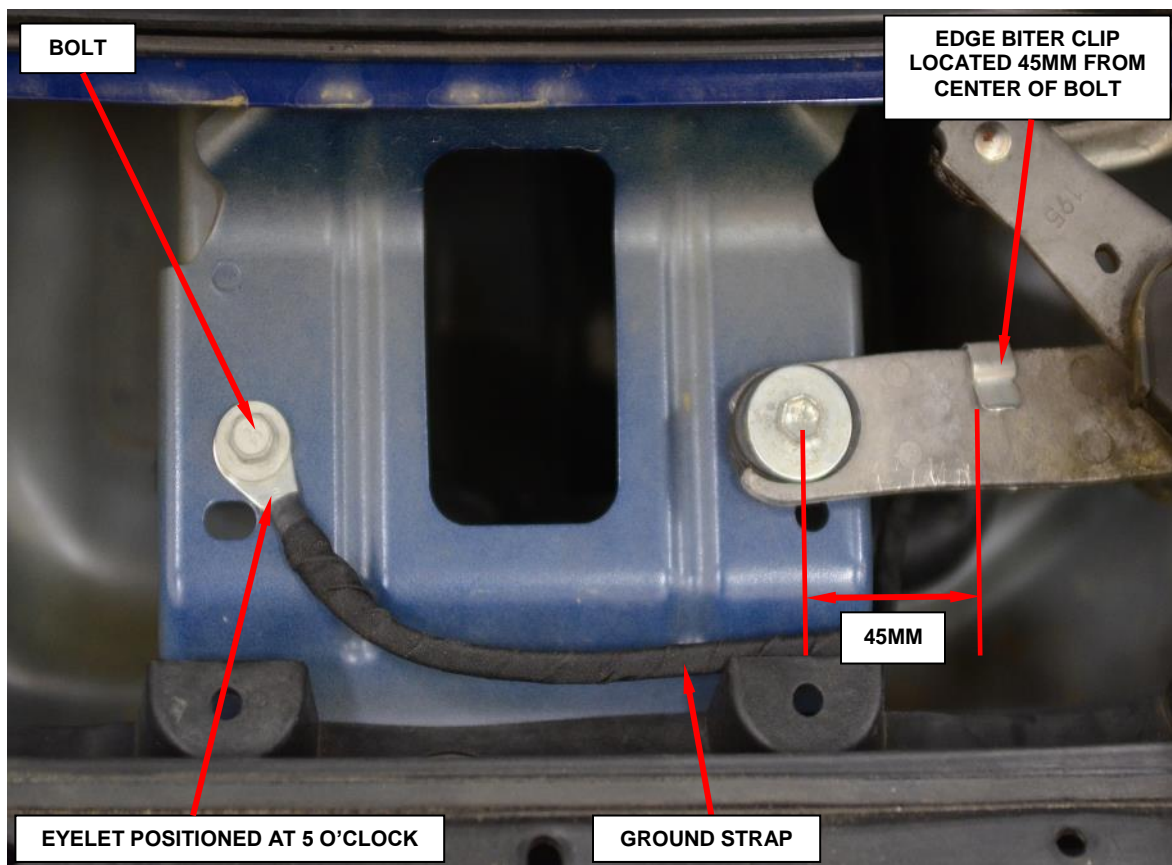


Figure 6 – Ground Strap Routing

Service Procedure Continued

8. Use the following steps to install the cowl panel cover and the wiper arms.
 - a. Position cowl panel cover to vehicle.
 - b. Starting in the center of the back edge of the cowl panel cover and working out to the edges, align the tab on the backside of the cowl panel into the groove in the lower windshield channel.
 - c. Using hand pressure fully insert cowl panel cover tab into windshield insert.
 - d. Install the six push pins attaching cowl panel cover to cowl.

NOTE: Be certain that the wiper motor is in the park position before attempting to install the front wiper arms.

- e. The front wiper arms must be indexed to the pivot shafts with the front wiper motor in the park position to be properly installed. Position the wiper arm pivot end onto the wiper pivot shaft so that the lower edge of the wiper blade is aligned with the wiper alignment marks located near or within the lower margin of the windshield.
- f. Once the wiper blades are aligned, lift the wiper arms away from the windshield slightly to relieve the spring tension on the pivot end and push the pivot ends of the wiper arms down firmly and evenly over the pivot shaft.
- g. Install and tighten the nuts that secure the wiper arms to the pivot shafts. Tighten the nuts to 15 ft. lbs. (20 N·m).
- h. Install the plastic caps onto the wiper arm pivot ends.
- i. If equipped, align the clips on the driver's side wiper cover and engage clips with hand pressure.
- k. Align the clips on the right and left fender to cowl muckets and engage with hand pressure.

Service Procedure Continued

9. Perform the following as required based on **Section A. Inspect Wiper System.**

- If **B2349** code **was** present, continue with **Section C. Replace Body Control Module.**
- If **B2349** code **was not present**, continue with **Step 9.**

10. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector first before connecting the negative battery cable. Connect the battery negative cable.

11. Close the hood and return the vehicle to the customer.

Service Procedure (Continued)**C. Replace Body Control Module**

NOTE: The following procedure is required if the body control module requires replacement based on the inspection in section “A”. Very few vehicles are expected to require this repair.

1. Disconnect and isolate the negative battery cable. If equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS connector first before disconnecting the negative battery cable.
2. Using a trim stick C-4755 or equivalent, remove the driver side end cap (Figure 7).
3. Remove the lower left side A-Pillar extension trim (Figure 8).
4. Remove the left side door sill scuff panel (Figure 8).



Figure 7 – Driver Side End Cap

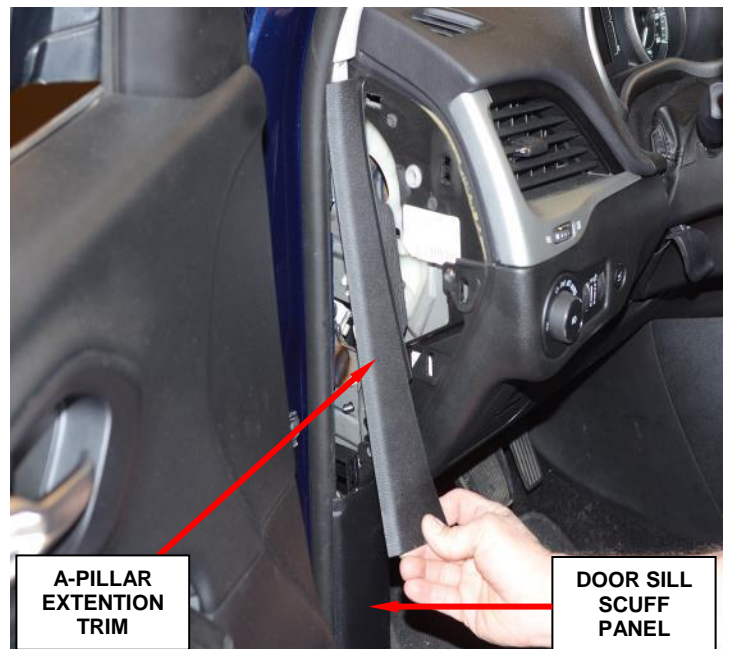
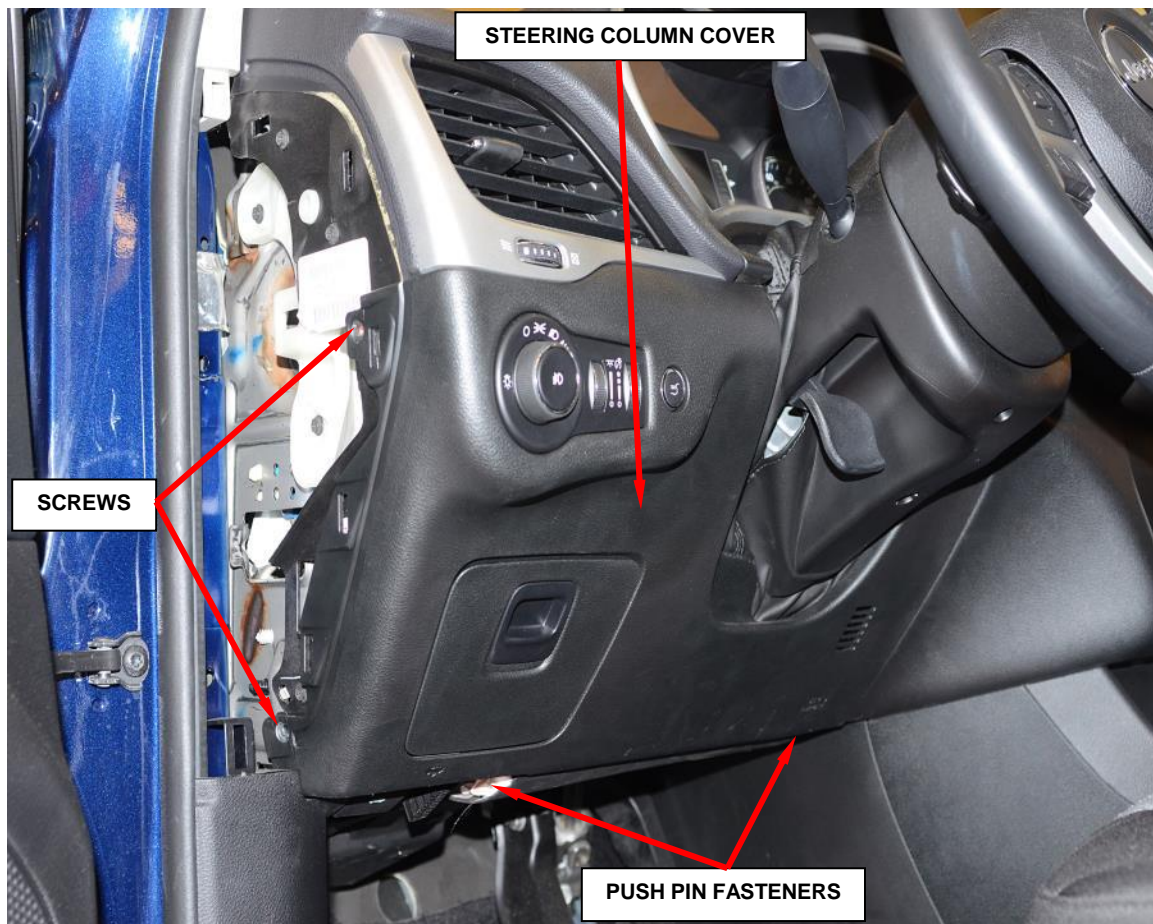


Figure 8 – A-Pillar Extension Trim

Service Procedure (Continued)

5. Use the following steps to remove the steering column cover from the instrument panel.
 - a. Remove the two screws and two push pin fasteners from the steering column cover (Figure 9).
 - b. Using a trim stick or equivalent, separate the retaining clips and remove the steering column cover.
 - c. Disconnect the headlight electrical connector and remove the cover from the vehicle.

**Figure 9 – Steering Column Cover**

Service Procedure (Continued)

6. Remove the three screws that secure the hood release bracket to the instrument panel structure (Figure 10).
7. Disconnect the data link connector from the hood release bracket. Position the bracket to the side with the hood release cable still attached (Figure 10).

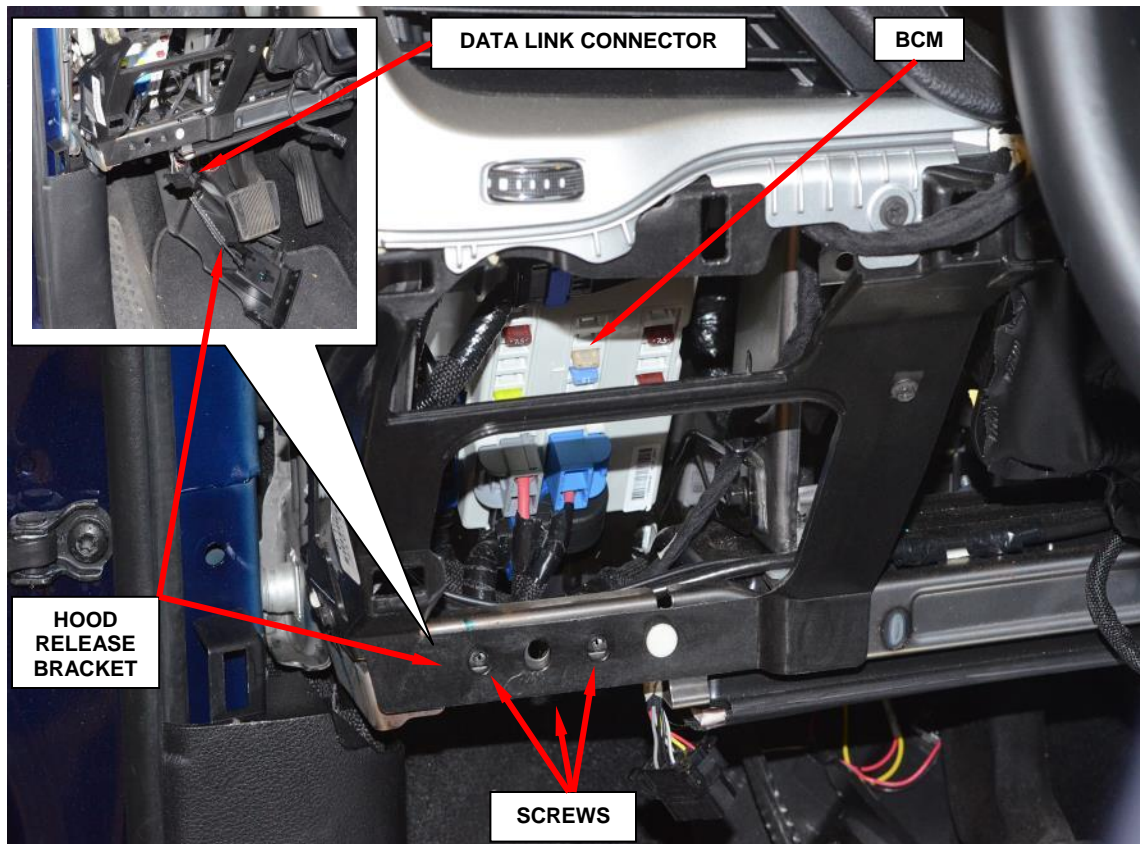
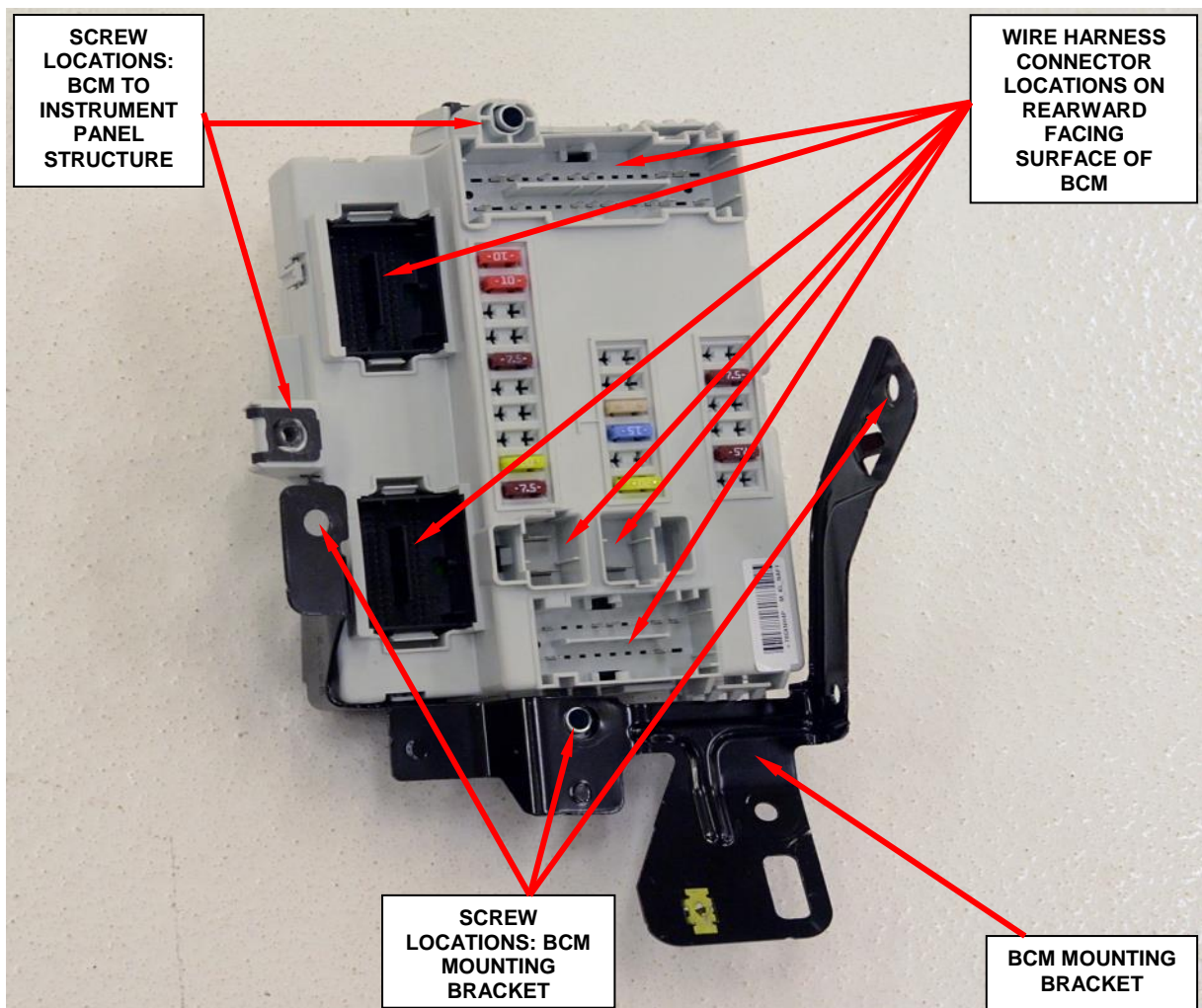


Figure 10 – Hood Release Bracket

Service Procedure (Continued)

8. Disconnect the wire harness connectors from the rearward facing surface of the BCM (Figure 11).
9. Remove the three screws that secure the BCM mounting bracket (Figure 11).
10. Position the BCM mounting bracket and wire harness to the side.
11. Remove the two screws that secure the BCM to the instrument panel structure (Figure 11).
12. Disconnect the electrical connectors from the forward facing surface of the BCM and remove the BCM from the instrument panel.



**Figure 11 – BCM Mounting
(Removed from Vehicle for Photographic purposes)**

Service Procedure (Continued)

13. Connect the electrical connectors to the forward facing surface of the **NEW** BCM and position the **NEW** BCM to the instrument panel structure.
14. Install and tighten the two screws that secure the BCM to the instrument panel structure. Tighten the screws to 30 in. lbs. (3 N·m).
15. Position the BCM mounting bracket to the instrument panel support structure.
16. Install and tighten the three screws that secure the BCM mounting bracket to the instrument panel structure. Tighten the screws to 30 in. lbs. (3 N·m).
17. Connect the wire harness connectors to the connector receptacles on the rearward facing surface of the BCM housing.
18. Install the data link connector to the hood release bracket.
19. Position the hood release bracket to the instrument panel.
20. Install the three hood release bracket screws and tighten securely.
21. Install the steering column cover to the instrument panel.
22. Install the left sill scuff panel.
23. Install the left A-pillar extension trim.
24. Install the left side instrument panel end cap.
25. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector first before connecting the negative battery cable. Connect the battery negative cable.

Service Procedure (Continued)

NOTE: The wiTECH scan tool must be used to perform this recall. The wiTECH software is required to be at the latest release level before performing this procedure. If the reprogramming flash for the BCM is aborted or interrupted, repeat the procedure.

26. Open the hood. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

NOTE: Use an accurate stand-alone voltmeter. The battery charger volt meter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.

27. Connect the wiTECH VCI pod to the vehicle data link.
28. Place the ignition in the “**RUN**” position.
29. Open the wiTECH Diagnostic application.
30. Starting at the “Select Tool” screen, highlight the row/tool for the wiPOD device you are using. Then select “**Next**” at bottom right side of the screen.
31. Enter your “**User id**” and “**Password**”, then select “**Finish**” at the bottom of the screen.
32. From the “**Vehicle View**” screen, click on the **BCM** icon.
33. From the “**BCM View**” screen, compare the “**Current ECU Flash Number**” with the “**New Part Number**” listed on the “**sort table**”. If the “**Current ECU Flash Number**” is the same as the “**New Part Number**” continue to **Step 39**. If the part numbers are not the same, continue to **Step 34**.
34. With the cursor over the desired flash file, click the small green arrow button on the right side of the screen.

Service Procedure (Continued)

35. From the **“ECU Flash”** screen follow the wiTECH screen instructions to complete the flash.
36. Once the flash is complete click the **“OK”** button on the **“ECU Flash”** screen.
37. Select the **“Clear Stored DTC’s”** button.
38. From the **“BCM View”** screen, compare the **“Current ECU Flash Number”** with the **“New Part Number”** listed on the **“sort table”**. If the **“Current ECU Flash Number”** is the same as the **“New Part Number”** the flash is complete, continue with **Step 39**. If the part numbers are not the same, repeat **Steps 32 through 37**.
39. Using the wiTECH scan tool, in the **“Vehicle View”** screen under the **“Vehicle Preparations”** tab select **“Restore BCM PROXI Configuration”** and follow the screen prompts.
40. Using the wiTECH scan tool, in the **“Vehicle View”** screen under the **“Vehicle Preparations”** tab select **“PROXI Configuration Alignment”** and follow the screen prompts.
41. Using the wiTECH scan tool, in the **“Vehicle View”** screen under the **“RF Hub”** module select **“Miscellaneous Functions”** tab, then highlight and select **“BCM Immobilizer Replace”** and follow the screen prompts.

NOTE: Step 40 requires the vehicle PIN number using Dealer Connect / Service tab / Repair Information / Key Code to complete the wiTECH routine.

42. Perform the EPS VERIFICATION TEST.
 - a. Turn the ignition off.
 - b. Remove all test equipment.
 - c. Connect all previously disconnected components and connectors.

Service Procedure (Continued)

- d. Verify all accessories are turned off, the battery is fully charged and the charging system has a status of "charged".
- e. Verify that the ignition is on. With the scan tool, record and erase all Diagnostic Trouble Codes (DTCs) from all modules.

NOTE: Turn the steering wheel from stop to stop, holding at each stop position for One second.

- f. Turn the ignition off and wait five minutes. Turn the ignition on and using the scan tool, read DTCs from all modules.
 - g. If there are no DTCs present after turning ignition on, road test the vehicle for at least five minutes.
 - h. Again, with the scan tool read DTCs. If any DTCs are present, refer to the Table of Contents in the applicable section for the Diagnostic procedure and troubleshoot the new or recurring symptom.
 - i. If there are no DTCs present, continue with **Step 42**.
43. Turn the ignition to the “**OFF**” position and remove the wiTECH VCI pod and battery charger from the vehicle.
44. Close the hood and 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:

	<u>Labor Operation Number</u>	<u>Time Allowance</u>
Inspect Wiper System and Install Tape, Ground Strap and Bolt	08-R3-91-82	0.4 hours
Inspect Wiper System, Replace BCM and Install Tape, Ground Strap and Bolt	08-R3-91-83	1.3 hours

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

IMPORTANT SAFETY RECALL

R39 / NHTSA 15V-509

This notice applies to your vehicle (VIN: xxxxxxxxxxxxxxxxx).

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 **2014 model year Jeep® Cherokee vehicles**.

The problem is... The windshield wiper system in your vehicle may develop static electricity build-up. As a result, an Electro-Static Discharge (ESD) in the wiper system could feed back into the Body Control Module (BCM) internal electronics and cause the BCM to fail. A failed BCM could cause the windshield wiper to stop functioning without warning. Operating the vehicle without windshield wipers under certain driving conditions could limit the driver's view and cause a crash.

What your dealer will do... FCA will repair your vehicle free of charge (parts and labor). To do this, your dealer will install a ground strap to the windshield wiper linkage module. The ground strap will prevent the build-up of static electricity in the windshield wiper system. All vehicles must be inspected for front wiper functionality. Vehicles found with non-functioning wiper system and Diagnostic Trouble Code B2349 must have the Body Control Module (BCM) replaced. The work will take up to 1 hour to complete. 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 Group Recall Assistance Center at either **fcarecalls.com** or 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 **fcarecalls.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 **safecar.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

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