



Revised (2) November 2016

Dealer Service Instructions for:

Safety Recall S76 / NHTSA 16V-734

Front Impact Sensor Wires

NOTE: Revised dimension in Steps 40 and 44.

Models

2016-2017 (JK) Jeep® Wrangler

NOTE: This recall applies only to the above vehicles built from June 14, 2015 through August 13, 2016 (MDH 061411 through 081303).

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 impact sensor wire(s) on about 182,000 of the above vehicles may become detached during a crash event before the “impact signal” is recorded by the Occupant Restraint Controller (ORC). Vehicles may experience no airbag and or pretensioner deployment in certain crash events where airbag or pretensioner deployment is expected. Failure to deploy the airbags or pretensioners when required during a crash event could increase the risk of injury or death to front seat occupants.

Repair

The existing front end module wire harness must be modified then routed and secured to a new location.

Parts Information

| <u>Part Number</u> | <u>Description</u> |
|--------------------|---|
| 68271635AA | Clip, Tie Strap (2 per vehicle) (Package contains 4 Tie Straps) (MSQ 4) |
| 04778138 | Tape, Cloth (one roll repairs approximately 6 - 8 vehicles) |

Parts Return

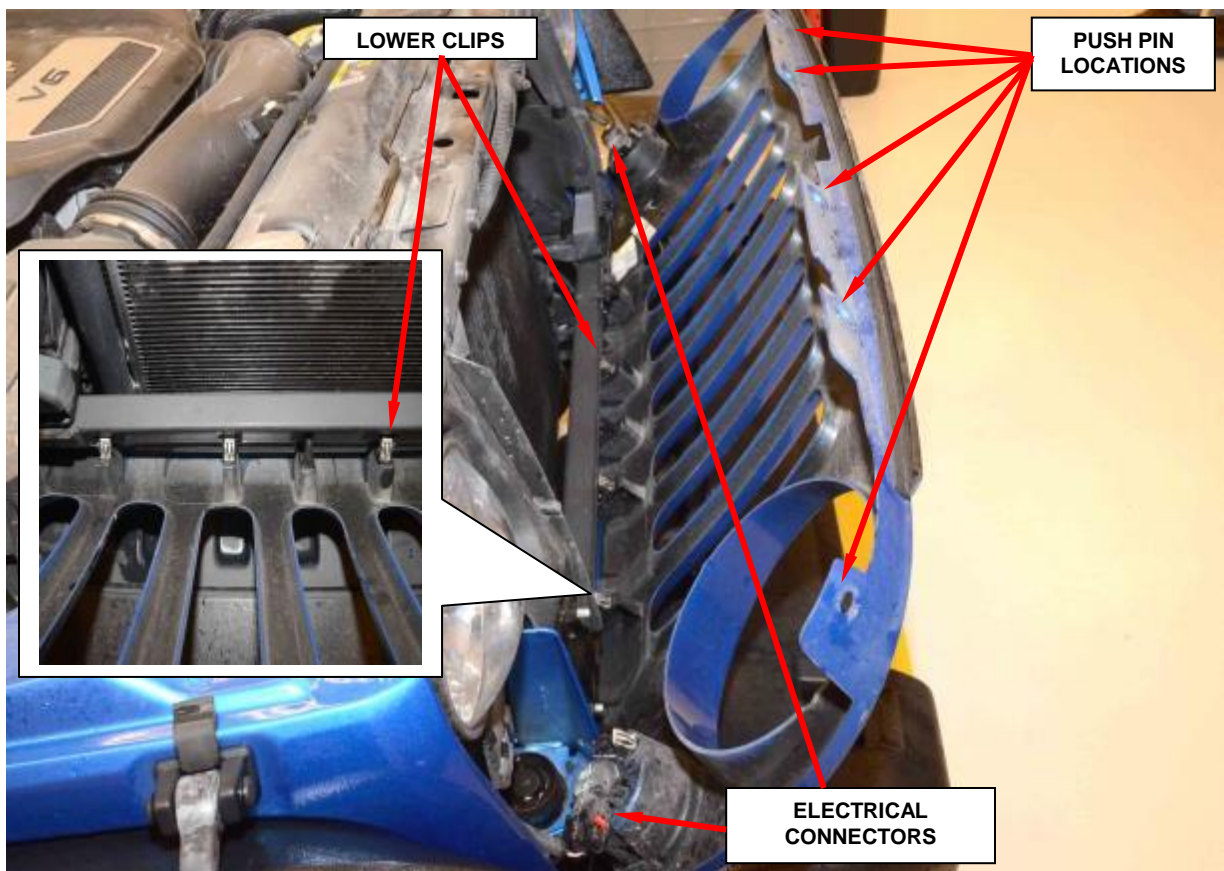
No parts return required for this campaign.

Special Tools

No special tools are required to perform this service procedure.

Service Procedure**A. Relocate Impact Sensor Wires**

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. Wait two minutes for the system capacitor to discharge before further service.
2. Pull up on the center of the push pin insert to release then remove and save the six push pin fasteners (Figure 1).
3. Using a trim stick C-4755 or equivalent, release the lower clips and separate the grille from the front end module (Figure 1).
4. Disconnect the electrical connectors (Figure 1).
5. Remove and save the grille.

**Figure 1 – Front Grille**

Service Procedure (continued)

6. Remove the headlamp units.

- For vehicles equipped with **LED** headlamps, grasp the right headlamp assembly mounting collar and firmly pull forward to remove. Disconnect the electrical connector and discard the headlamp assembly. Repeat on the left side (Figure 2).

NOTE: LED Headlamp Units are retained using one-time retention clips.

- For vehicles equipped without **LED** headlamps continue with Step 7.

7. Remove the four screws that secure the retainer and the right headlamp unit to the mounting (Figure 3).

8. Pull the retainer and the right headlamp unit away from the front of the vehicle far enough to access the wiring connection on the back of the lamp housing.

9. Disconnect the engine compartment wire harness connector from the right headlamp bulb connector receptacle (Figure 4).

10. Remove the right headlamp unit from the vehicle.



Figure 2 – Right Headlamp Unit with LED



Figure 3 – Right Headlamp Unit without LED

Service Procedure (continued)

- Repeat steps 7 through 10 to remove the left headlamp unit.

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.

NOTE: The front and side impact sensors are interchangeable.

- Disconnect the right side engine compartment wire harness connector from the right front impact sensor connector receptacle (Figure 4).
- Release the right side wire harness retaining clip from the headlamp bracket (Figure 5).
- Pull the pigtail through the headlamp opening for access then remove and **discard** the wire harness retaining clip (Figure 6).

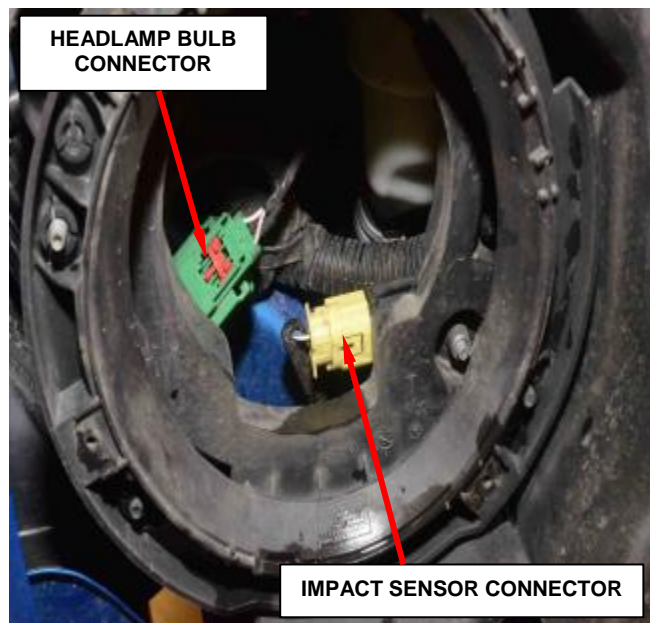


Figure 4 – Right Side Impact Sensor



Figure 5 – Wire Harness Retaining Clip

Service Procedure (continued)

CAUTION: Remove tape in the next two steps using hands only. Do not use a knife or any sharp instrument that may cut and damage the wires.

15. Remove the end wrap at the right front impact sensor (Figure 6).
16. Remove the T-wrap tape at two locations from the wire harness (Figure 6).

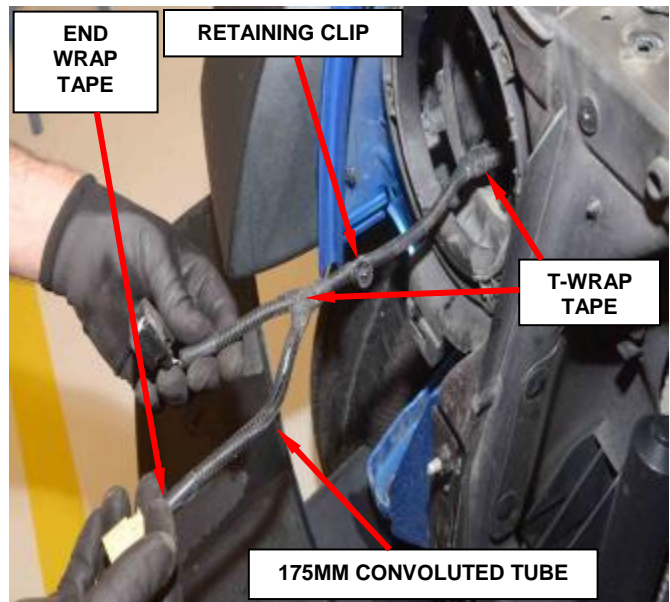


Figure 6 – Remove Tape

17. Remove and save the 175mm (7in) convoluted tube from the right front impact sensor wiring pigtail (Figure 6).
18. Cut the 175mm (7in) convoluted tube to a length of **110mm** (4.5in) and save for future use).
19. Remove and save the 185mm (7.25in) section of convoluted (Figure 7).



Figure 7 – Convoluted Tube

Service Procedure (continued)

20. Relocate the right front impact sensor wiring pigtail by pulling it rearward to the next wire harness takeout as shown (Figure 8).
21. Tape the right front impact sensor wiring pigtail to the wire harness bundle and make the pigtail length **110mm** (4.5in) (Figure 8).

NOTE: The pigtail length is measured from the middle of the wire harness bundle to the back of the front impact sensor connector.

22. Fold back the excess wire length to the wire harness bundle and tape securely (Figure 8).

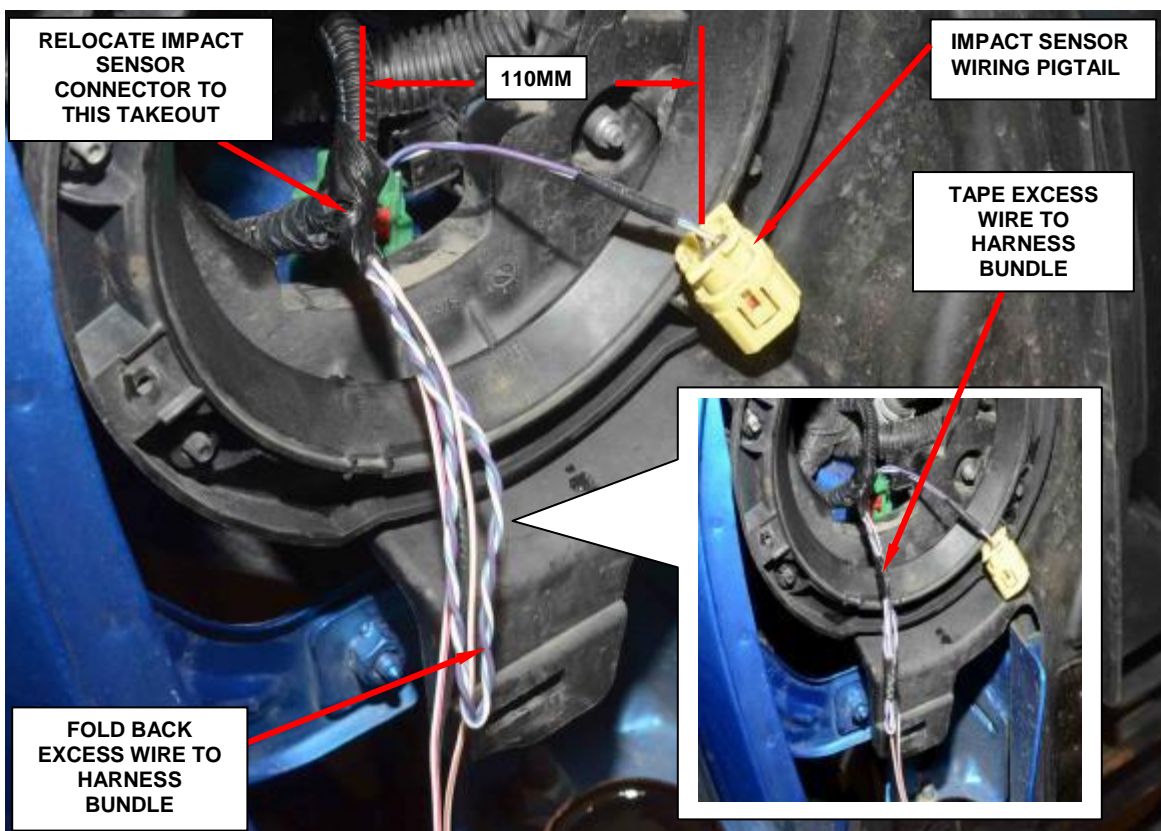


Figure 8 – Relocate Impact Sensor Pigtail

Service Procedure (continued)

23. Install the 185mm (7.25in) convoluted tube to wire harness (Figure 9 and 10).

24. Install the saved 110mm (4.5in) convoluted tube to the right front impact sensor wiring pigtail (Figures 9).

25. Tape the end of the convoluted tube at the right front impact sensor (Figures 9 and 10).

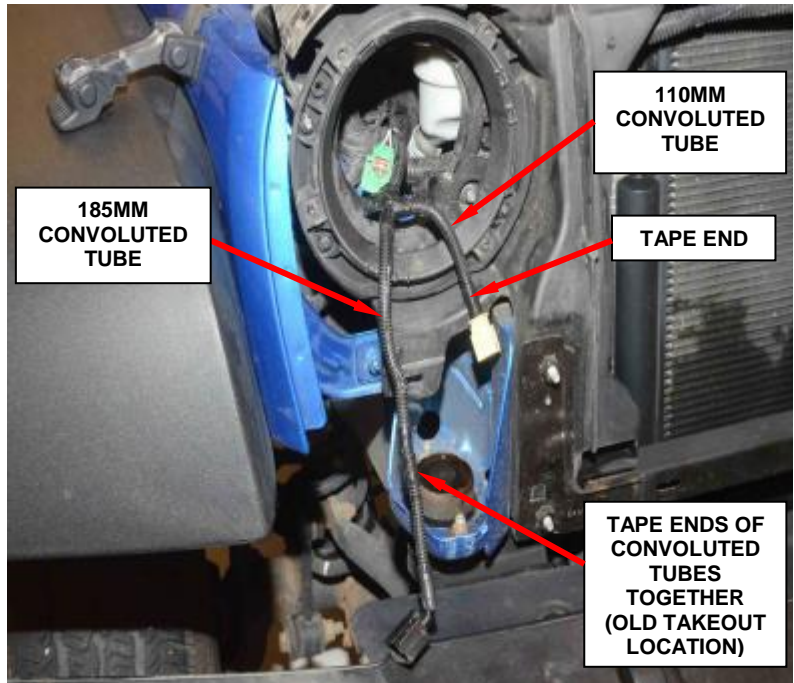


Figure 9 – Install Convoluted Tubes

26. Tape the convoluted tubes at the old takeout location on the wire harness (Figure 9).

27. T-wrap tape the new takeout location on the wire harness (Figure 10).

NOTE: Be sure to tape over all exposed wires.

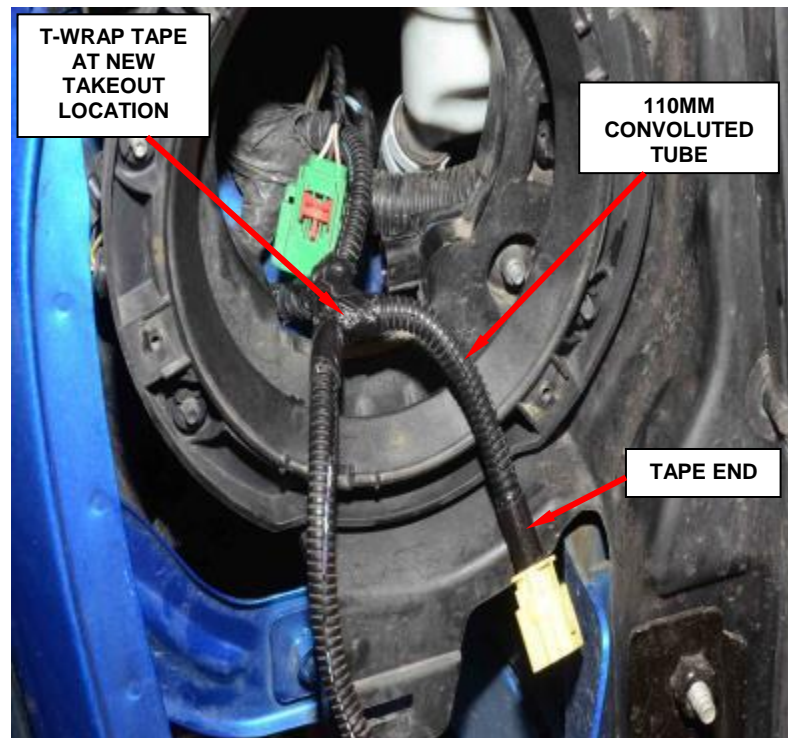


Figure 10 – T-Wrap Tape

Service Procedure (continued)

28. Install a **NEW** wire harness retaining clip to the wire harness 135mm (5.5in) from the new takeout as shown. Trim off excess length (Figure 11).
29. Route the harness back through the headlamp opening.
30. Clip the wire harness to the headlamp bracket (Figure 5).
31. Connect the right front impact sensor connector (Figure 4).

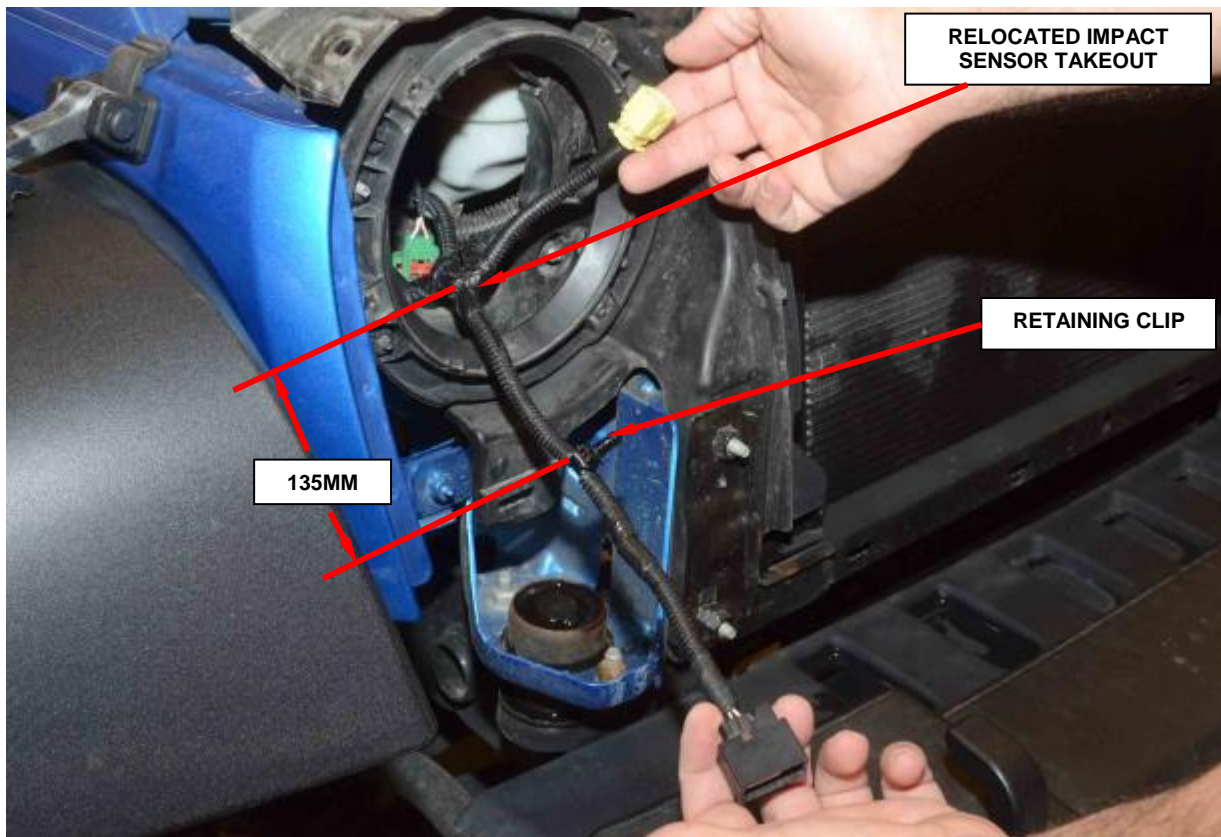


Figure 11 – Wire Harness Retaining Clip

Service Procedure (continued)

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.

NOTE: The front and side impact sensors are interchangeable.

32. Disconnect the left side engine compartment wire harness connector from the left front impact sensor connector receptacle (Figure 12).
33. Release the left side wire harness retaining clip from the headlamp bracket.
34. Pull the pigtail through the headlamp opening for access to rework the harness (Figure 13).
35. Remove and **discard** the wire harness retaining clip from the wire harness (Figure 13).

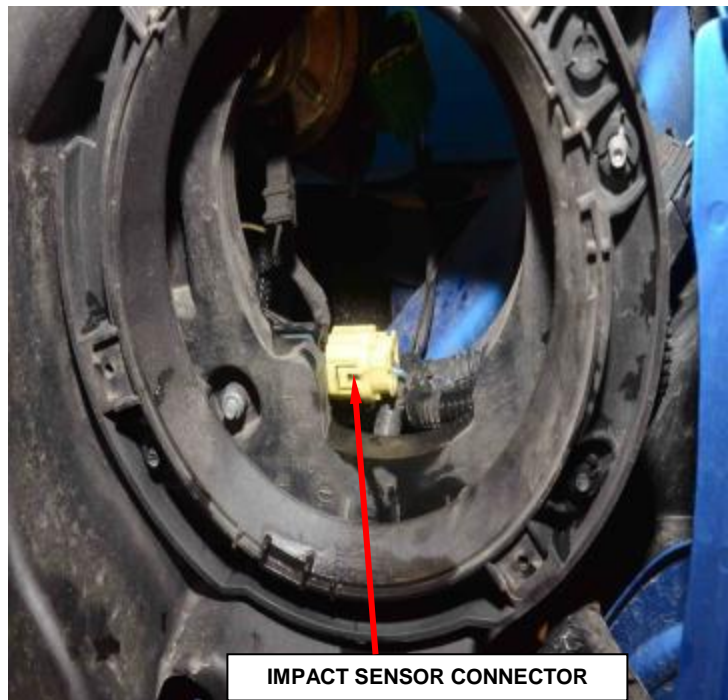


Figure 12 - Left Side Impact Sensor

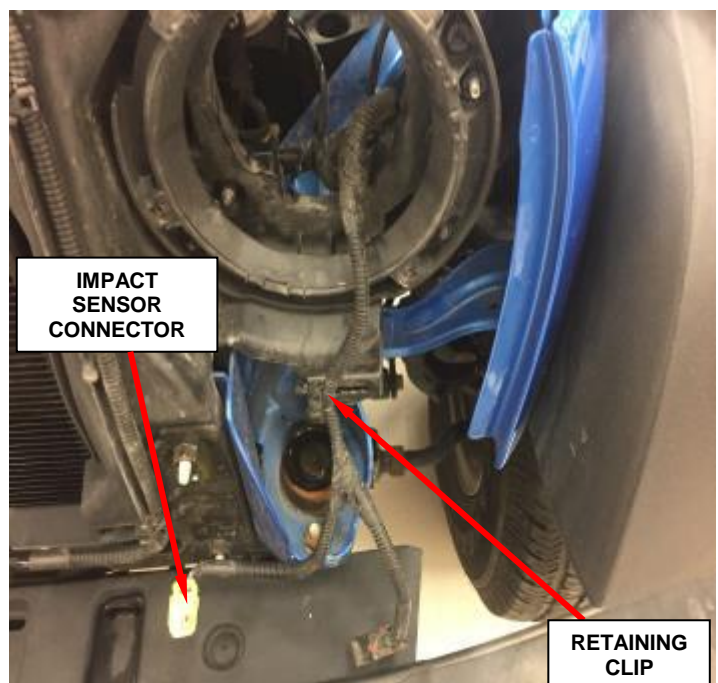


Figure 13 – Wire Harness Retaining Clip

Service Procedure (continued)

CAUTION: Remove tape in the next two steps using hands only. Do not use a knife or any sharp instruments that may cut and damage the wires.

36. Remove the end wrap at the left front impact sensor (Figure 14).
37. Remove the T-wrap tape at two locations from the wire harness (Figure 14).

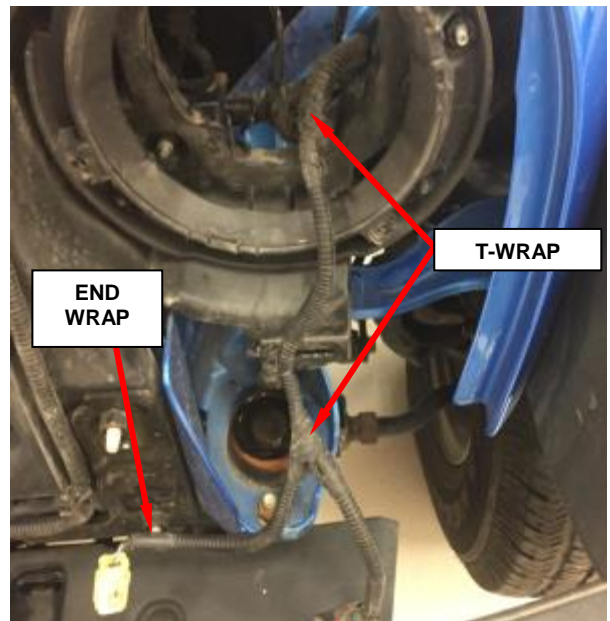


Figure 14 – Remove Tape

38. Remove and save the 175mm (7in) convoluted tube from the left front impact sensor wiring pigtail (Figure 15).
39. Cut the 175mm (7in) convoluted tube to a length of **120mm** (4.75in) and save for future use.
40. Remove and save the 185mm (7.25in) section of convoluted (Figure 15).

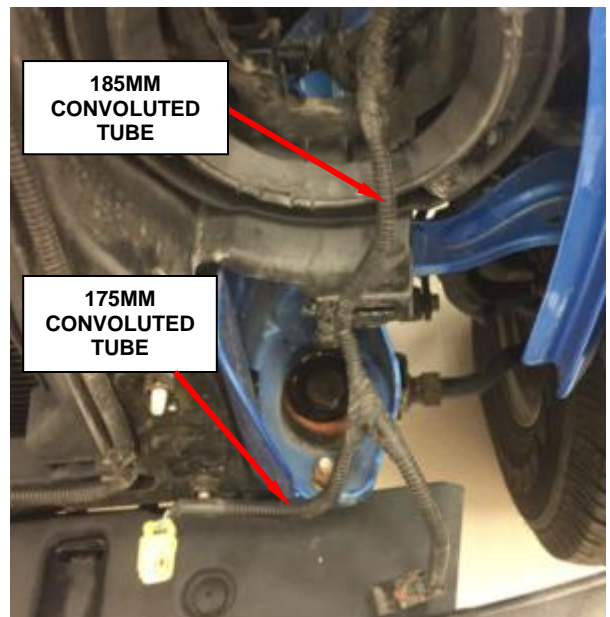


Figure 15 – Convoluted Tube

Service Procedure (continued)

41. Relocate the left front impact sensor wiring pigtail by pulling it rearward to the next wire harness takeout as shown (Figure 16).
42. Tape the left front impact sensor wiring pigtail to the wire harness bundle and make the pigtail length **120mm** (4.75in) (Figure 16).

NOTE: The pigtail length is measured from the middle of the wire harness bundle to the back of the front impact sensor connector.

43. Fold the excess wire length to the wire harness bundle and tape securely (Figure 16).

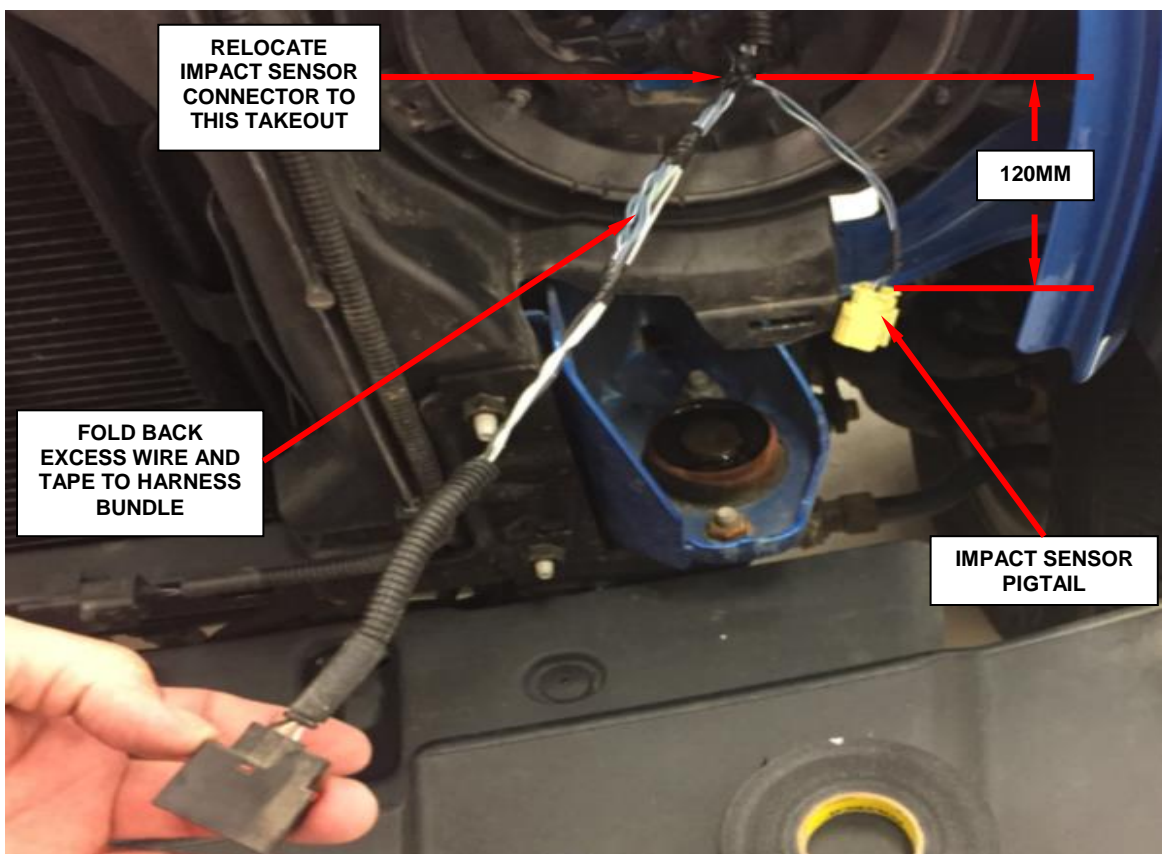


Figure 16 – Relocate Impact Sensor Pigtail

Service Procedure (continued)

44. Install the 185mm (7.25in) convoluted tube to wire harness (Figure 17).
45. Install the 120mm (4.75in) convoluted tube to left front impact sensor wiring pigtail (Figure 17).
46. Tape the end of the convoluted tube at the left front impact sensor (Figure 17).
47. T-wrap tape the new takeout location on the wire harness (Figure 17).
48. Tape the convoluted tubes at the old takeout location on the wire harness (Figure 17).

NOTE: Be sure to tape over all exposed wires.

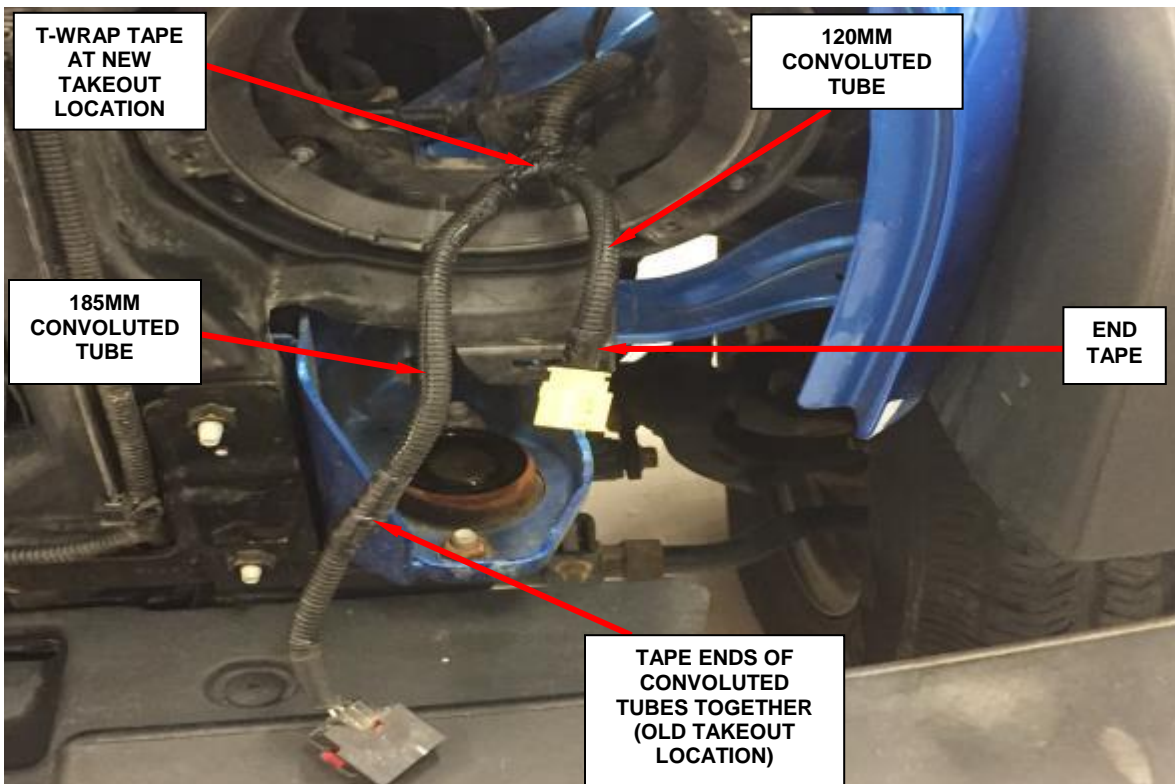


Figure 17 – Install Convoluted Tubes

Service Procedure (continued)

49. Install a **NEW** wire harness retaining clip to the wire harness 135mm (5.5in) from the new takeout as shown. Trim off excess length (Figure 18).
50. Route the harness back through the headlamp opening.
51. Clip the wire harness to the headlamp bracket.
52. Connect the left front impact sensor connector (Figure 12).

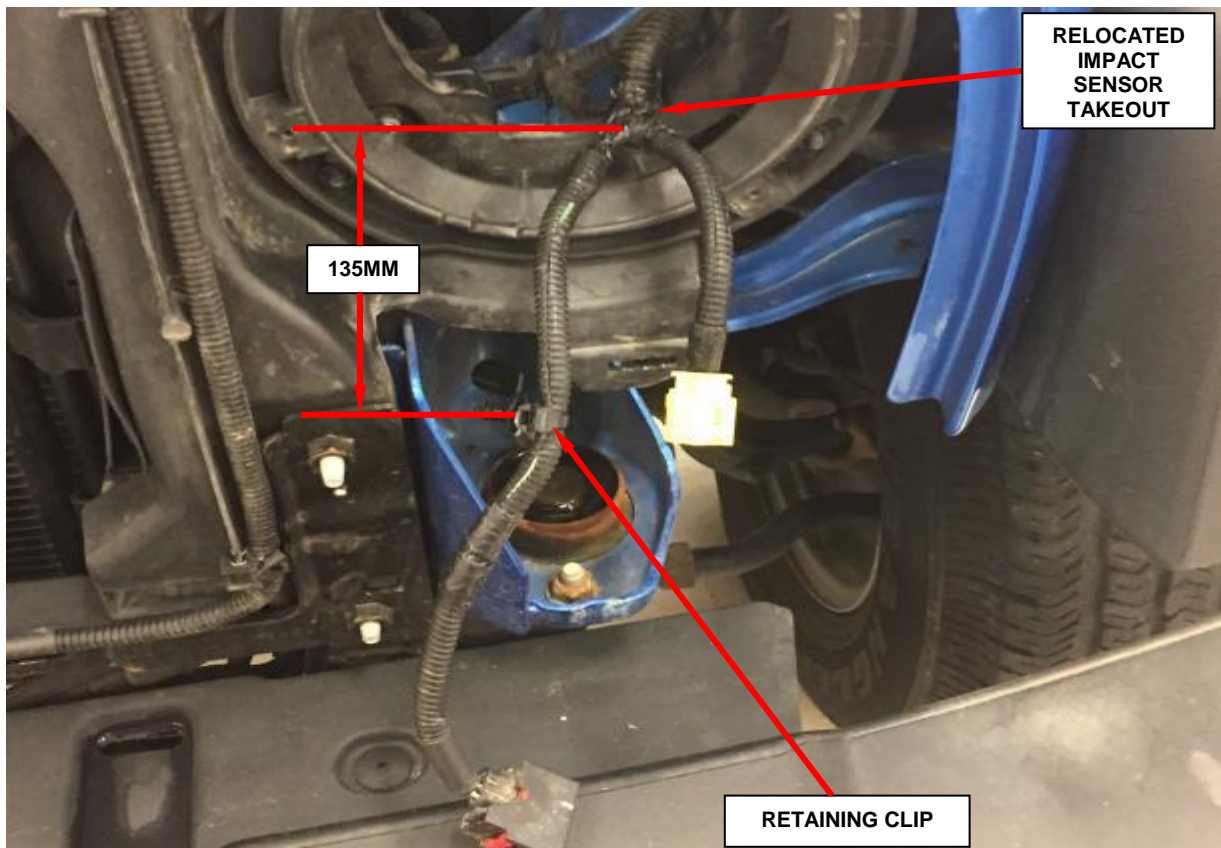


Figure 18 - Wire Harness Retaining Clip

Service Procedure (continued)

NOTE: For 2017 MY vehicles equipped with LED Headlamps (20 vehicles were identified within the population) replacement of both Headlamp Units is required. Do not order Headlamps until inspection and verification has been completed.

Each dealer with vehicle(s) equipped with LED headlamps will need to email the VIN requiring parts to campaignteam@fcagroup.com due to the small vehicle population. Once the VIN is verified parts will be ordered on your behalf. Approximately 20 vehicles are expected to require 68304050AA and 68304051AA.

68304050AA Headlamp Unit, Right (LED) (2017 my ONLY)

68304051AA Headlamp Unit, Left (LED) (2017 my ONLY)

53. Position the right headlamp unit close enough to the front of the vehicle to connect the engine compartment wire harness connector to the headlamp bulb connector receptacle.
 - For **2017 MY** vehicles equipped **with** LED headlamp units, align the **NEW** right side LED headlamp unit to the three mounting studs and press the headlamp unit until all three positions are snapped in securely. **Repeat on the left side.** Continue with Step 58.
 - For vehicles equipped **without** LED headlamp units, continue with step 54.
54. Position the headlamp unit by aligning and engaging the index tabs on the back of the lamp with the depressions in the mounting collar on the face of the front end module carrier.
55. Install the retainer over the headlamp unit and against the mounting collar with the retainer screw tabs in alignment with the screw holes in the collar.

Service Procedure (continued)

56. Install and tighten the four screws that secure the retainer to the collar. Tighten the screws until they are fully seated (Figure 2).
57. Repeat steps 53 through 56 to install the left headlamp unit.
58. Connect the electrical connectors to the grille (Figure 1).
59. Position the grille onto the front end module and seat the clips fully (Figure 1).
60. Install the six push pin fasteners (Figure 1).
61. **Do not connect the battery negative cable at this time.** The supplemental restraint system verification test procedure should be performed following service of any supplemental restraint system component. Continue with **Section B. Supplemental Restraint System (SRS) Verification Test.**

Service Procedure (continued)**B. Supplemental Restraint System (SRS) Verification Test**

NOTE: During the following test, the battery negative cable must remain disconnected and isolated during steps 1 and 2 of the Supplemental Restraint System (SRS) Verification Test.

NOTE: The wiTECH scan tool must be used to perform the SRS Verification Test. The wiTECH software is required to be at the latest release before performing the SRS Verification Test.

1. Connect the micro pod II to the vehicle data link connector located under the instrument panel to the left of the steering column.
2. Turn the ignition switch to the “ON” position then exit the vehicle and close the doors.
3. Check to be certain that nobody is in the vehicle. Connect the negative cable terminal to the vehicle battery negative post and tighten the terminal securely. If equipped with an Intelligent Battery Sensor (IBS), connect the IBS connector after connecting the battery negative cable terminal to the battery.
4. Open the wiTECH Diagnostic application.
5. Starting at the “Select Tool” screen, select the row/tool for the micro pod II device you are using, then select “Next”.
6. Enter your “**User id**” and “**Password**”, then select “**Finish**”.
7. Using wiTECH, clear all DTC’s in all modules.

NOTE: Any active Diagnostic Trouble Codes (DTCs) may require an additional key cycle from “ON” to “OFF” to change DTC status from “active” to “stored”.

Service Procedure (Continued)

8. Turn the ignition switch to the “OFF” position for about 15 seconds, and then back to the “ON” position. Observe the airbag indicator in the instrument cluster.
 - The airbag indicator in the instrument cluster should illuminate for six to eight seconds, and then turn off. This indicates that the SRS is functioning normally and that the repairs are complete. Turn the ignition to the “OFF” position then remove the micro pod II.
 - If the airbag indicator fails to illuminate or the indicator lamp stays ON, there is still an active SRS fault or malfunction. Refer to the appropriate diagnostic information to diagnose the problem.

9. Close the hood and remove the wiTECH micro pod II.

10. 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> |
|--|--|----------------------------------|
| Modify wire harness and perform SRS verification Test | 08-S7-61-82 | 1.1 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

S76 / NHTSA 16V-734

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

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

Dear: (Name)

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain **2016 and 2017 model year Jeep® Wrangler vehicles**.

The problem is... The front impact sensor wire(s) on your vehicle may become detached during a crash event before the “impact signal” is recorded by the Occupant Restraint Controller (ORC). Vehicles may experience no airbag or pretensioner deployment in certain crash events where airbag or pretensioner deployment is expected. Failure to deploy the airbags or pretensioners when required during a crash event could increase the risk of injury or death to front seat occupants.

What your dealer will do... FCA will repair your vehicle free of charge. To do this, your dealer will modify the existing wire harness then route and secure the wire harness to a new location. The work will take about 2 hours 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.