

April 2010

Dealer Service Instructions for:

Customer Satisfaction Notification J38 Supplemental Front Airbag Sensors

Models

2005-2006 (RS) Dodge Caravan, Grand Caravan and Chrysler Town & Country

NOTE: This notification applies only to the above vehicles built from January 19, 2005 through April 5, 2006 (MDH 011900 through 040500).

IMPORTANT: Many of the vehicles within the above build period have already been repaired according to our warranty records, and therefore, have been excluded from this notification. Only the above vehicles originally sold or currently registered in certain states are involved. See the "Owner Notification and Service Scheduling" section for a list of states involved in this notification.

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

Subject

The supplemental front airbag sensors on about 310,000 of the above vehicles may crack under certain conditions and allow water to enter into the sensor. These sensors were added to enhance the performance of the vehicle's airbag system; however, a cracked sensor may not operate properly in a frontal crash. A cracked sensor can also illuminate the airbag warning light.

Repair

The right and left supplemental front airbag sensors must be replaced and the sensor wiring harness connectors must be inspected and replaced, if necessary.

Parts Information

Part Number	Description	

CBX2G091 Supplemental Front Airbag Sensor Package

Each package contains the following components:

Quantity	<u>Description</u>
2	Sensor, supplemental front airbag
4	Washer
4	Bolt, standard thread
4	Bolt, self tapping thread

<u>Each dealer</u> to whom vehicles in this notification were assigned will receive enough Supplemental Front Airbag Sensor packages to service about <u>50%</u> of those vehicles.

Part Number	<u>Description</u>
J8126688	Grease, Dielectric (Each tube services about 150 sensor connectors)
	(MSQ: 12 tubes)

NOTE: Due to the likelihood that the required dielectric grease is already in your parts inventory, no dielectric grease will be distributed initially. Additional quantities may be ordered as needed.

<u>Part Number</u>	<u>Description</u>
CBX2G092	Wiring Harness Splice Package

Each kit contains the following components:

Quantity	<u>Description</u>
2	Band, splice
1	Connector, sensor wiring harness
2	Tube, heat shrink

NOTE: The wiring harness splice package is only required for vehicles found with corrosion in the sensor connector.

Parts Information (Continued)

Part Number Description

CBX2G093 Riv-nut Package

Each kit contains the following components:

Quantity	Description
4	Riv-nut
1	Bolt (used as an installation tool)
1	Nut with washer (used as an installation tool)

NOTE: The riv-nut package is only required if the riv-nut(s) on the vehicle spin in the lower radiator crossmember.

Special Tools

The following special tools may be required to perform this repair:

> NPN TechCONNECT PC or equivalent

> CH2002 General Purpose Interface Bus Cable Assembly

> CH6000A Scan Tool (DRBIII®)

> CH7000A/J1962 Cable with red DRBIII connector

> NPN TechCONNECT Workstation

➤ 10042* Wire splice crimp tool

* NOTE: One wire splice crimp tool was mailed to each Chrysler/Jeep/Dodge dealer free of charge in June, 2007. For warranty issues regarding the wire splice crimping tool sent in June, contact Wright Tool Company at 1-800-783-9826.

Additional wire splice crimp tools can be purchased, at dealer expense, by calling Miller Special Tools at 1-800-801-5420 during regular business hours. Contact Miller Special Tools regarding warranty issues on any purchased tools.

Service Procedure

A. Supplemental Front Airbag Sensor Replacement

- 1. Lower the driver's window completely.
- 2. Open the hood.
- 3. Disconnect and isolate the negative battery cable.

NOTE: To enhance customer satisfaction, remember to reset the clock when you have completed the service procedure.

- 4. Raise the vehicle on a suitable hoist.
- 5. Disconnect the wiring harness connector to the right and left supplemental front airbag sensor. The sensors are located on the outside of the right and left frame rails at the radiator lower crossmember (Figure 1).

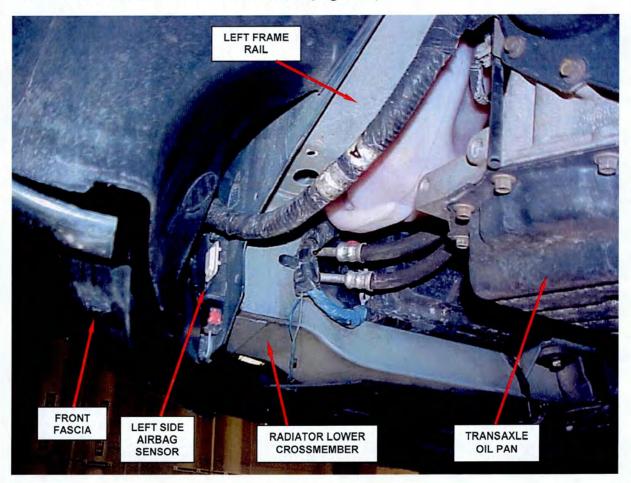


Figure 1 - Left Side Airbag Sensor Shown

- 6. Remove the right and left supplemental front airbag sensors and discard the sensors and retaining bolts.
 - CAUTION: If the retaining bolt spins freely and cannot be removed, the sensor's riv-nut has broken loose from the radiator lower crossmember. Continue with Step 7 to install a new riv-nut (PN CBX2G093). If there was no problem when removing the sensor retaining bolts, continue with Step 9.
- 7. Use the following procedure, if required, to replace a spun riv-nut:
 - a. <u>For vehicles with fog lamps</u>, disconnect the electrical harness connector to the left and right fog lamps.
 - b. Remove the four screws (two each side) that secure the left and right wheelhouse splash shield to the front fascia.
 - c. Remove the right and left side fascia-to-fender bolts.
 - d. Carefully separate the lower air dam plastic push retainers from the lower radiator crossmember.
 - e. Partially lower the vehicle.
 - f. Remove the right and left fascia bolts from the upper radiator crossmember (Figure 2).



Figure 2 - Left Side Shown

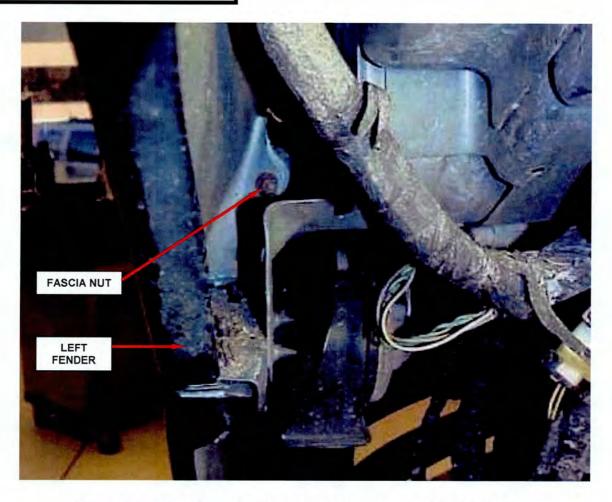


Figure 3 - View from Inside Wheel Opening (Left Side Shown)

- g. Pull the wheelhouse shield back from the front fascia and remove the right and left nuts holding the front fascia to the front lip of the fender (Figure 3).
- h. Carefully remove the front fascia and set it aside.

CAUTION: Be careful not to scratch the painted surfaces of the front fascia and front fenders.

- i. Break the supplemental front airbag sensor apart using a suitable tool. Remove broken airbag sensor pieces from the vehicle and discard.
- j. Using a cut-off wheel, remove the head of the airbag sensor mounting bolt.

Service Procedure (Continued)

- k. Remove and discard the supplemental front airbag sensor bushing.
- 1. Using a hammer, carefully drive the bolt and the riv-nut into the lower radiator crossmember.

CAUTION: Do not distort the structural sheet metal surface where the riv-nut is attached.

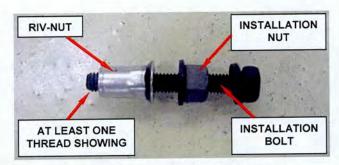


Figure 4 – Riv-Nut Installation

m. Remove the old riv-nut through the access hole of the lower radiator crossmember using a magnetic tool.

NOTE: Be sure to completely remove the riv-nut from the lower radiator crossmember.

- n. Pre-assemble the new riv-nut by installing the installation nut and the riv-nut onto the installation bolt as shown in Figure 4.
- o. Insert the new riv-nut-bolt/nut assembly into the original riv-nut hole in the lower radiator crossmember.
- p. Using a 10mm crows foot, tighten the installation nut to 80 in. lbs. (9 N·m) while holding the head of the installation bolt stationary (Figure 5).
- q. Loosen the installation nut and remove the installation bolt and nut from the riv-nut.
- r. Repeat Steps 7i through 7q for each airbag sensor mounting riv-nut that has broken loose (spins freely).

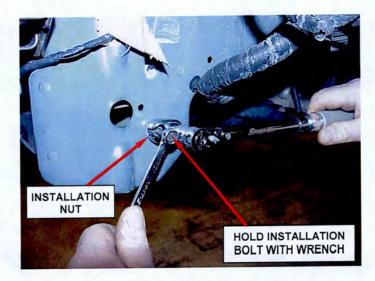


Figure 5 – Riv-Nut Installation

- 8. **For vehicles that had the front fascia removed**, use the following procedure to install the front fascia:
 - a. Position the front fascia onto the vehicle.
 - b. Install the right and left upper fascia bolts finger tight (Figure 6).
 - c. Install the right and left nuts that fastens the front fascia to the front lip of the front fender. Tighten the nut to 60 in. lbs. (7 N·m).
 - d. Install and tighten the two fascia-to-fender bolts.
 - e. Install the four screws (two on each side) that secure the right and left wheelhouse shield to the front fascia.

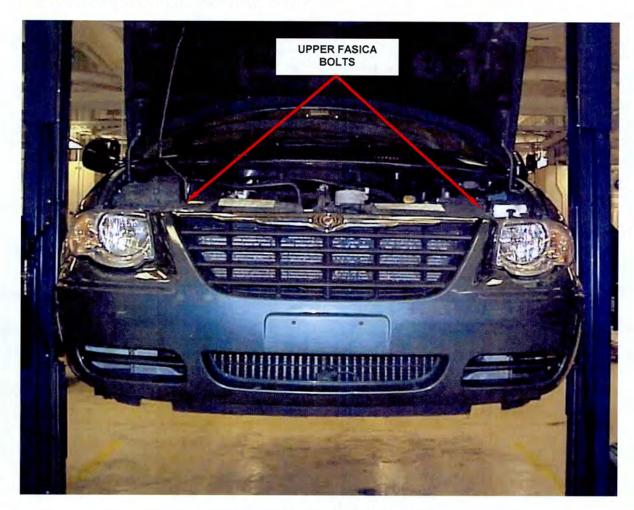


Figure 6 - Upper Fascia Bolts

Service Procedure (Continued)

- f. Using new push pins if necessary, install the air dam to the lower radiator crossmember.
- g. For vehicles with fog lamps, connect the electrical harness connectors to the fog lamps.
- h. Continue with Step 9.
- 9. Inspect the right and left supplemental front airbag sensor wiring connectors.
 - ➤ If there <u>is corrosion</u> (white, green or black) on either terminal of the harness connectors, continue with **Section B. Airbag Sensor Harness Connector Replacement**.
 - ➤ If there is no corrosion on either terminal of the harness connectors, continue with Section C. Supplemental Front Airbag Sensor Installation.

B. Airbag Sensor Harness Connector(s) Replacement

NOTE: Only those harness connector(s) that exhibit terminal corrosion, as described in Section A, require replacement.

- 1. Cut off 3 inches (75 mm) of the old supplemental front airbag sensor wire harness connector as measured from the end of the sensor connector.
- 2. Remove about 1 inch (25 mm) of black tape from the sensor wire harness.
- 3. Remove 1/2 inch (13 mm) of insulation from each wire.
- 4. Cut the new harness connector wires so that the final length is equal to the old harness.
- 5. Remove 1/2 inch (13 mm) of insulation from each new harness connector wire.
- 6. Slide one piece of heat shrink tubing onto each of the harness connector wires.
- 7. Load and center the brass splice band into cavity "B" of the wire splice crimp tool (#10042) and close the tool just enough to hold the splice band in place.
- 8. Match the new harness connector wires to the existing vehicle airbag sensor harness connector wires as follows:
 - For the right (passenger side) supplemental front airbag sensor, connect the purple wire on the new connector wiring harness to the purple (w/blue tracer) wire on the body wiring harness. Connect the white wire on the new connector wiring harness to the white (w/blue tracer) wire on the body wiring harness.
 - For the left (driver's side) supplemental front airbag sensor, connect the purple wire on the new connector wiring harness to the blue (w/purple tracer) wire on the body wiring harness. Connect the white wire on the new connector wiring harness to the blue (w/white tracer) wire on the body wiring harness.

CAUTION: Ensure that wire color/polarity is correct. Incorrect wire color/polarity will cause illumination of the airbag warning lamp.

- 9. Insert the new and existing wire strands (from opposite sides) into the splice band/crimp tool so that they overlap each other inside of the splice band (Figure 8).
- 10. Crimp the splice band and wires together by squeezing the crimping tool handles.

NOTE: The tool will release once the proper crimping force has been achieved.

11. Solder the connection together using only rosin core type solder.

CAUTION: DO NOT use acid core solder.

12. Center the heat shrink tubing over the joint and heat using a heat gun. Apply heat to the heat shrink tube until the tubing is tightly sealed and sealant comes out of both ends of the tubing.

CAUTION: Use only the sealant lined heat shrink tube provided. Use of electrical tape or non-sealant lined heat shrink may cause circuit failure.

13. Continue with Section C. Supplemental Front Airbag Sensor Installation.

C. Supplemental Front Airbag Sensor Installation

- 1. Clean the supplemental front airbag sensor mounting surface for both sensors.
- Install the new supplemental front airbag sensors using the fasteners included in the Supplemental Front Airbag Sensor Package CBX2G091.

NOTE: Use the bolts with a blue thread locker patch on the threads. Discard the pointed self tapping screws and flat washers. They will not be used in this repair procedure.

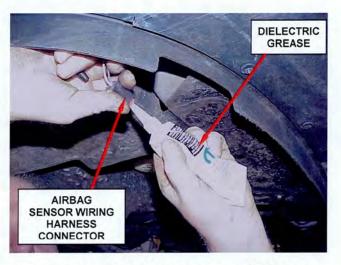


Figure 7 - Dielectric Grease Installation

- 3. Hand-start the new sensor fastening bolts for the right and left supplemental front airbag sensors into the riv-nuts.
- 4. Tighten the sensor fastening bolts to 60 in. lbs. (7 N·m).
- 5. Apply a small amount of dielectric grease (PN J8126688) to the right and left supplemental front airbag sensor harness connector (Figure 7).

NOTE: Using your finger, force the dielectric grease into the terminal pins of each supplemental front airbag sensor wiring harness connector.

- 6. Connect the wiring harness connectors to the right and left supplemental front airbag sensors.
- 7. Lower the vehicle from the hoist.
- 8. For vehicles that had the Fascia removed, tighten the upper fascia bolts to 50 in. lbs. (5 N·m).
- 9. Connect the negative battery cable to the battery.

Service Procedure (Continued)

- 10. Stand next to the vehicle with the driver's door closed. Reach in through the window opening, going behind the steering wheel and turn the ignition key to the "RUN" position. Wait 10 seconds:
 - > If the airbag warning light is not illuminated, the repair has been completed. No further action is required, return the vehicle to the customer.
 - ➤ If the airbag warning light was illuminated due to a supplemental front airbag sensor fault when the vehicle was brought in for this repair, continue with Step 11 to clear the Diagnostic Trouble Codes (DTC's).
- 11. Use the following procedure to clear DTC's:
 - a. Turn the ignition key to the "OFF" position and connect the DRBIII to the vehicle.

NOTE: The DRBIII must be at software Version 64.0 or later.

- b. Turn the ignition key to the "RUN" position.
- c. Press the "YES" button after the DRBIII powers up.
- d. Select "DRBIII STANDALONE" and press "ENTER".
- e. Select "1998-2007 DIAGNOSTICS" and press "ENTER".
- f. Select "ALL" and press "ENTER".
- g. Select "PASSIVE RESTRAINT" and press "ENTER".
- h. Select "AIRBAG" and press "ENTER".
- i. Select "READ DTC's" and press "ENTER".
- j. Select "STORED" and press "ENTER".
- k. Press the "PAGE BACK" button and follow the screen prompts.
- 1. Disconnect and remove the DRBIII from the vehicle 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 Chrysler to record Customer Satisfaction Notification service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

	Labor Operation Number	Time <u>Allowance</u>
Replace both supplemental front airbag sensors and inspect sensor electrical connectors.	08-J3-81-82	0.4 hours
Related Operations:		
Replace one riv-nut	08-J3-81-51	0.8 hours
Replace each additional riv-nut	08-J3-81-52	0.3 hours
Replace one harness connector	08-J3-81-53	0.3 hours
Replace two harness connector	08-J3-81-54	0.5 hours
Clear Diagnostic Trouble Codes	08-J3-81-55	0.1 hours

Add the cost of the repair parts package 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 Chrysler 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.

Only vehicles <u>originally</u> <u>sold</u> or <u>currently</u> <u>registered</u> in the following states are involved in this notification.

Alaska	Massachusetts	Pennsylvania
Connecticut	Michigan	Rhode Island
Delaware	Minnesota	South Dakota
Illinois	Missouri	Utah
Indiana	Nebraska	Vermont
Iowa	New Hampshire	Washington, DC
Kansas	New Jersey	West Virginia
Kentucky	New York	Wisconsin
Maine	North Dakota	
Maryland	Ohio	

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 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 Services Field Operations Chrysler Group LLC