



September 2013

Dealer Service Instructions for:

Safety Recall N48 / NHTSA 13V-291 Occupant Restraint Control Module

Models

2013 (RT) Dodge Grand Caravan and Chrysler Town & Country

NOTE: This recall applies only to the above vehicles built from June 11, 2013 through June 12, 2013 (MDH 061117 through 061208).

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 Control (ORC) module on about 180 of the above vehicles may contain a software error that could affect airbag deployment during certain types of vehicle collisions. This could cause an increased risk of injury during certain crash conditions.

Repair

The ORC module must be replaced.

Parts Information

Part Number Description

68233535AA Module, Occupant Restraint Control

<u>Each dealer</u> to whom vehicles in the recall were assigned will receive enough ORC modules to service about 20% of those vehicles.

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

WARNING: To avoid serious or fatal injury on vehicles equipped with side curtain airbags, disable the Supplemental Restraint System (SRS) before attempting any Occupant Restraint Controller (ORC) module diagnosis or service. The ORC module may contain a rollover sensor, which enables the system to deploy the side SRS components in the event of a vehicle rollover event. If an ORC module containing a rollover sensor is accidentally rolled during service while still connected to battery power, the side SRS components will deploy. 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 take the proper precautions could result in accidental airbag deployment.

WARNING: To avoid serious or fatal injury, never strike or drop the Occupant Restraint Controller (ORC) module, as it can damage the impact sensor or affect its calibration. The ORC module contains the impact sensor, which enables the system to deploy the Supplemental Restraint System (SRS) components. If an ORC module is accidentally dropped during service, the ORC module must be scrapped and replaced with a new unit. Failure to observe this warning could result in accidental, incomplete, or improper SRS component deployment.

1. <u>For vehicles with a base/premium center console</u>, remove and save the center console from between the front seats (Figure 1).



Figure 1 - Base/Premium Center Console

- 2. For vehicles with a full floor center console, use the follow the removal procedure:
 - a. Remove and save the four lower rear console fasteners (Figure 2).

NOTE: Move the front seats full forward for access to the two rear most console fasteners and fully rearward for the front most console fasteners.

b. Using a plastic trim stick, remove and save the top cover of the center console (Figure 3).

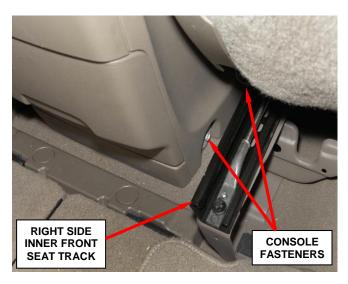


Figure 2 – Console Lower Fasteners (right side shown)

NOTE: The center console top cover is held in place only with clips.



Figure 3 - Center Console Top Cover

- c. Remove and save the two console retaining screws (Figure 4).
- d. Remove and save the plastic push pins from the console side panels.
- e. Carefully remove and save the center console assembly (Figure 5).
- 3. Disconnect and isolate the negative cable from the battery.



Figure 4 – Center Console Retaining Screws

WARNING: Wait two minutes for the system capacitor to discharge before continuing with this service procedure.



Figure 5 – Remove Center Console from Vehicle

- 4. For vehicles with a base/premium center console, remove and save the lower center stack cover (Figure 6).
- 5. For vehicles equipped with Electronic Stability Program (ESP), remove the dynamic sensor from the right side of the Occupant Restraint Controller (ORC) module mounting bracket.
- 6. Disconnect the instrument panel wire harness connector and body wire harness connector from the ORC module connector receptacles located on the rearward facing side of the module.

NOTE: To disconnect the wire harness connectors from the ORC module, depress the release tab and lift the lever arm to the fully open position on each connector.

- 7. Remove and save the three screws that secure the ORC module to the ORC module mounting bracket.
- 8. Working from the right side of the vehicle, lift the ORC module to disengage the locating tabs and remove the original ORC module from the bracket.
- 9. Working from the right side of the vehicle, position the new ORC module onto the ORC module mounting bracket. When the ORC module is correctly positioned, the arrow on the ORC label will be pointed forward in the vehicle and the locating pins on the bottom of the ORC will be engaged into the locating holes in the bracket (Figure 3).



LOCATING TAB

DIRECTION ARROW

LOCATING TAB

Figure 7 - ORC Module

- 10. Install and tighten the three screws that secure the ORC module to the ORC module mounting bracket. Tighten the screws to 80 in. lbs. (9 N·m).
 - CAUTION: The lever arms of the wire harness connectors for the ORC module MUST be in the unlatched position before they are inserted into their connector receptacles on the ORC module or they may become damaged.
- 11. Reconnect the body wire harness connector and the instrument panel wire harness connector to the ORC module connector receptacles located on the rearward facing side of the ORC module. Be certain that the latches on both connectors are each fully engaged.
- 12. <u>For vehicles equipped with Electronic Stability Program (ESP)</u>, install the Electronic Stability Program (ESP) dynamic sensor onto the right side of the ORC module mounting bracket.
- 13. <u>For vehicles with a base/premium center console</u>, install the lower center stack cover (Figure 6).
- 14. Install the center console (Figure 1 standard console / Figure 5 full floor console).
- 15. <u>For full floor console</u>, install and tighten four lower rear console fasteners to 89 in. lbs. (10N.m) (Figure 2).
- 16. For full floor console, install the two console retaining screws (Figure 4).
- 17. **For full floor console**, install the top panel of the center console (Figure 3).
- 18. **For full floor console**, install the plastic push pins into the console side panels.

- 19. Use the following procedure to perform the Supplemental Restraint System (SRS) Verification Test:
 - a. 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 inside hood release, outboard of the steering column.
 - b. Remove the "START" button from the ignition switch.
 - c. Insert the key fob into the ignition switch and place the ignition switch in the "**RUN**" position and exit the vehicle with the scan tool.
 - d. Check to be certain that nobody is in the vehicle, then reconnect the negative cable to the battery.
 - e. Using the scan tool, read and record the active (current) Diagnostic Trouble Code (DTC) data.

20. Use a diagnostic scan tool to access "**Miscellaneous Functions**" for the ORC module and perform the "**Module Initialization Procedure**". This will erase the DTC and initialize the ORC module.

NOTE: Service ORC modules are shipped in an UNLOCKED state. The UNLOCKED state disables all of the squib circuits. The ORC module diagnostics are enabled during a learning period (ignition cycle). The airbag indicator will stay ON until the ORC module is LOCKED with the scan tool, but may also stay ON if active Diagnostic Trouble Codes (DTC's) are present. Before the ORC module may be LOCKED:

- > System voltage must be within normal range and the CAN-C data bus must not be in the OFF condition.
- ➤ Valid bus messages used for learning vehicle configuration must be received at least twice by the ORC module.
- ➤ The ORC module must learn and program the vehicle configuration based upon both CAN-C bus messages and hard wired equipment inputs during an ignition cycle.
- > If equipped, the Occupant Detection Sensor (ODS) and the Electronic Pedestrian Protection (EPP) system are learned if a valid load is measured on the related hard wired circuits.

The new ORC module will not allow itself to be LOCKED until it has successfully learned a vehicle configuration. However, if the configuration has been learned, it shall allow itself to be LOCKED with an active or stored DTC.

The default ORC module configuration will cause a configuration mismatch fault to be set. A configuration mismatch is defined as: The feature is not configured, but the ORC module found a valid load on the related circuits when tested. When first installed, the ORC module will set a B-2722 DTC, "ORC UNLOCKED - ALL DEPLOYMENT DISABLED".

- 21. Using the scan tool, read and record any stored DTC's and then erase any stored DTC's.
- 22. Place the ignition switch in the "**OFF**" position for 15 seconds, and then place the ignition switch back to the "**ON**" position. Observe the airbag indicator lamp in the instrument cluster. It should light from four to six seconds, and then go out. This indicates that the SRS is functioning normally.
- 23. Remove the key fob from the ignition switch and install the "START" button.

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 recall service completions and provide dealer payments.

Use the following labor operation number and time allowance:

	Labor Operation <u>Number</u>	Time Allowance
Replace ORC Module (with base or premium console)	08-N4-81-82	0.6 hours
Replace ORC module (with full floor center console	08-N4-81-83	0.8 hours

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

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 Chrysler 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 <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 Chrysler Group LLC