



**Revised September 2019** 

Dealer Service Instructions for:

# Safety Recall V73 / NHTSA 19V- 438 Occupant Restraint Controller

NOTE: Revised sections A, B, C and added section H "Restore vehicle configuration" and revised LOP's.

#### Remedy Available

#### 2019 (BV) Jeep® Renegade

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**

On about 745 of the above vehicles equipped with the Upland trim package and an Occupant Restraint Controller (ORC) calibrated to non-Upland trim package that are involved in a frontal collision with a longitudinal delta-V below 16 MPH sufficient to trigger low-output air bag deployment (stage 1 only) may experience a high-output air bag deployment (stage 1 and stage 2). High-output air bag deployment in low speed vehicle crashes that would otherwise call for low-output air bag deployment in the suspect vehicles may increase the risk of injury to front seat vehicle occupants during a crash.

# Repair

Inspect the ORC module software part number if the current ECU part number <u>IS</u> the same as the **NEW** part number, perform sections A, B and H. If the current ECU part number in <u>NOT</u>, the same as the **NEW** part number perform sections A through G of the service procedure.

### **Parts Information**

Part Number Description

68485388AA ORC

#### **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. Obtain vehicle PIN

- 1. From the home page of DealerCONNECT select the "Service" tab
- 2. From the "Repair Information" section select "Key Code".
- 3. Enter the VIN, the reason code and password, agree to terms and select search.
- 4. The PIN will be displayed, record this number for later use.
- 5. Continue with section **B. Inspect the ORC software level**

#### **B.** Inspect the ORC software level

- 1. Connect the wiTECH micro pod II to the vehicle data link connector.
- 2. Place the ignition in the "**RUN**" position.
- 3. Open the wiTECH 2.0 website.
- 4. Enter your "User id" and "Password" and your "Dealer Code", then select "Sign In" at the bottom of the screen. Click "Accept".
- 5. From the "Vehicle Selection" screen, select the vehicle to be updated.
- 6. From the "Action Items" screen, select the "Topology" tab.
- 7. From the "Topology" screen, click on the "ORC" icon.
- 8. From the "ORC" screen, select the "Flash" tab, then compare the "Current Electronic Control Unit (ECU) Part Number" with the "New ECU Part Number" listed.
  - ➤ If the last 4 digits of the current ECU part number are equal to or higher than "0709", proceed to section <u>H. Restore vehicle configuration.</u>
  - ➤ If the last 4 digits of the current ECU part number are **NOT** equal to or higher than "0709", proceed to section **C.** Restore vehicle configuration.

### C. Restore vehicle configuration

- 1. From the "Topology" screen, click on the "BCM" icon.
- 2. From the "BCM" screen, select the "Misc. Functions" tab.
- 3. Perform the "Restore vehicle configuration" routine and follow the screen prompts. If the routine fails, perform a second time.
- 4. Select the "Topology" icon, go to "Action Items" screen then select "All DTCs" tab, "Clear All DTCs" and then select "Close".
- 5. Continue with section **D. Replace the ORC**.

#### D. Replace the ORC

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) diagnosis or service. The ORC 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 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 on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before attempting any steering wheel, steering column, airbags, airbag curtains, knee blocker, seat belt tensioner, impact sensor or instrument panel component diagnosis or service. Disconnect the Intelligent Battery Sensor (IBS)/negative battery cable assembly from the negative battery post, 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), as it can damage the impact sensor or affect its calibration. The ORC contains the impact sensor, which enables the system to deploy the SRS components. If an ORC is accidentally dropped during service, the 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.

NOTE: This Electronic Control Unit (ECU) is being replaced with a new unit, a diagnostic scan tool MUST be used to align the PROXI configuration data into the new ECU. Follow the routine outlined in the diagnostic scan tool for PROXI Configuration Alignment under Body Control Module (BCM) Miscellaneous Functions menu.

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. Using a trim tool, remove the right and left front side panels from the center floor console (Figure 1).

3. Disconnect the body harness retainer from the stud on the right side of the ORC and position the wire harness to the side.

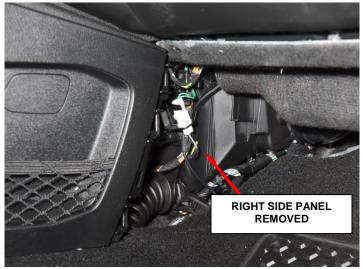




Figure 1 – Front Side Panels

- 4. Position the carpet down on both sides to gain access to the ORC.
- 5. Remove and save the top cover from the ORC (Figure 2).
- 6. Remove and save the three nuts that secure the ORC to the weld studs on the floor panel center tunnel (Figure 3).



Figure 2 – Top Cover / ORC Location



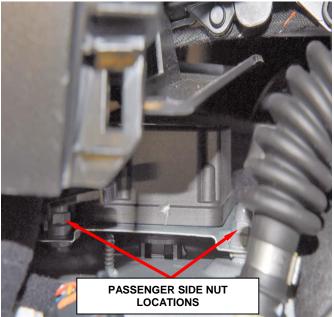


Figure 3 - ORC Mounting Nut Locations

- 7. Lift the ORC off of the weld studs and rotate the ORC to gain access to the wire harness connectors from the driver's side (Figure 4).
- 8. Disconnect the wire harness connectors from the rearward-facing end of the ORC. To disconnect the wire harness connector from the ORC, depress the release tab and lift the lever arm on the connector (Figure 4).
- 9. Remove and **DISCARD** the ORC.

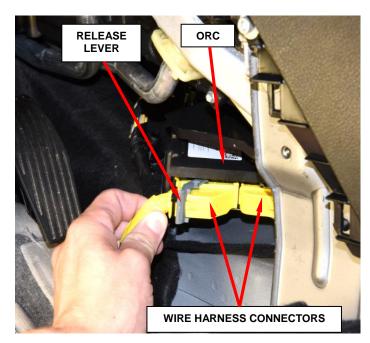


Figure 4 – Wire Harness Connectors

- 10. Connect both wire harness connectors to the rearward-facing end of the **NEW** ORC. Be certain that the latch on each connector is fully engaged.
- 11. Carefully position the **NEW** ORC onto the weld studs on the top of the floor panel center tunnel. When the ORC is correctly positioned, the bottom of the housing will fit flush with the top of the floor panel center tunnel and the orientation arrow on the label on top of the housing will be pointed forward in the vehicle.
- 12. Beginning with the right front nut, install and finger tighten the three nuts that secure the ORC to the weld studs on the top of the floor panel center tunnel.

NOTE: Assure the ORC is positioned even with full contact to the center tunnel prior to tightening the nuts.

13. Tighten the nuts to 71 in. lbs.  $(8 \text{ N} \cdot \text{m})$ .

- 14. Install the top cover to the ORC module.
- 15. Clip the body harness retainer to the stud.
- 16. Install the front side panels to the center floor console.
- 17. For vehicles equipped with a keyed ignition switch, turn the ignition switch to the "ON" position and exit the vehicle then **continue with Step 19**.
- 18. For vehicles equipped with keyless ignition node, check to be certain that nobody is in the vehicle and connect the IBS connector, if equipped, then connect the battery negative cable(s). Turn the ignition switch to the "ON" position then **continue with Step 20**.
- 19. Check to be certain that nobody is in the vehicle and connect the IBS connector, if equipped, then connect the battery negative cable(s).
- 20. Continue to section **E. Reprogram the ORC.**

#### E. Reprogram the ORC

NOTE: The wiTECH scan tool must be used to perform this recall. This procedure must be performed with the latest software release level. If the reprogramming flash for the ORC is aborted or interrupted, repeat the procedure. The ORC must be at the latest calibration level after completing this recall.

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. Open the hood. Install a battery charger and verify that the charging rate provides 13.2 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.

- 2. Connect the wiTECH micro pod II to the vehicle data link connector.
- 3. Place the ignition in the "**RUN**" position.
- 4. Open the wiTECH 2.0 website.
- 5. Enter your "User id" and "Password" and your "Dealer Code", then select "Sign In" at the bottom of the screen. Click "Accept".
- 6. From the "Vehicle Selection" screen, select the vehicle to be updated.
- 7. From the "Action Items" screen, select the "Topology" tab.
- 8. From the "Topology" screen, click on the "ORC" icon.

- 9. From the "ORC" screen, select the "Flash" tab.
- 10. Select the NEW ECU part number where the last 4 digits are equal to or higher than "0709".
- 11. From the flash ECU agreement page, agree to terms by checking the box.
- 12. Select "Flash ECU" then follow the wiTECH screen instructions to complete the flash.
- 13. Once the flash is complete, select the "View DTCs" tab.
- 14. Select "Clear All DTCs" and then select "Close".
- 15. Continue to section **F. Perform PROXI Alignment Procedure.**

#### F. Perform PROXI Alignment Procedure

- 1. From the "Topology" screen, click on the "BCM" icon.
- 2. From the "BCM" screen, select the "Misc Functions" tab.
- 3. Perform the "**PROXI alignment procedure**" routine and follow the screen prompts.
- 4. Perform the "PROXI alignment procedure" routine for the second time and follow the screen prompts to verify that All Control Units are correctly configured.
- 5. Select the "Topology" icon, go to "Action Items" screen then select "All DTCs" tab, "Clear All DTCs" and then select "Close".
- 6. Continue to section **G. Perform Longitudinal & Lateral Sensor Calibration**

#### G. Perform Longitudinal & Lateral Sensor Calibration

- 1. From the "Topology" screen, click on the "ABS" icon.
- 2. From the "ABS" screen, select the "Misc Functions" tab.
- 3. Perform the "Longitudinal & Lateral Sensor Calibration" routine and follow the screen prompts. If the routine Fails, perform a second time.
- 4. Select the "Topology" icon, go to "Action Items" screen then select "All DTCs" tab, "Clear All DTCs" and then select "Close".
- 5. Turn the ignition to the "**OFF**" position and then remove the wiTECH micro pod II device from the vehicle.
- 6. Remove the battery charger from the vehicle and then close the hood.
- 7. Return the vehicle to the customer.

#### **H. Restore vehicle configuration**

- 1. From the "**Topology**" screen, click on the "**BCM**" icon.
- 2. From the "BCM" screen, select the "Misc. Functions" tab.
- 3. Perform the "Restore vehicle configuration" routine and follow the screen prompts. If the routine Fails, perform a second time.
- 4. Select the "Topology" icon, go to "Action Items" screen then select "All DTCs" tab, "Clear All DTCs" and then select "Close".
- 5. Turn the ignition to the "**OFF**" position and then remove the wiTECH micro pod II device from the vehicle.
- 6. Remove the battery charger from the vehicle and then close the hood.
- 7. 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 <a href="Mailto:Number">Number</a>	Time Allowance
Inspect ORC Module Software Level and Perform Restore Vehicle Configuration	08-V7-31-83	0.2 hours
Inspect, Replace and Reprogram ORC Module, Perform Restore Vehicle Configuration, PROXI Alignment and ABS Sensor	00 1/7 21 04	0.71
Calibration.	08-V7-31-84	0.7 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 06/18/2016 and the remedy was made available on 09/19/2019, therefore, the number of days cannot exceed 93 days.

Vehicle	Average Daily Allowance
2019 (BV) Jeep Renegade	

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.

This notice applies to your vehicle,

V73/NHTSA 19V- 438

**LOGO** 

#### **VEHICLE PICTURE**

#### YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION
  Call your authorized Chrysler /
  Dodge / Jeep<sub>®</sub> / 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.

**QR Code** 

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 V73.

#### IMPORTANT SAFETY RECALL

#### **Occupant Restraint Controller**

Dear [Name],

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

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain [2019 Model Year (BV) Jeep Renegade] 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?

Vehicles [1] equipped with the Upland trim package and an Occupant Restraint Controller (ORC) calibrated to non-Upland trim package that are involved in a frontal collision with a longitudinal delta-V below 16 MPH sufficient to trigger low-output air bag deployment (stage 1 only) may experience a high-output air bag deployment (stage 1 and stage 2). **High-output air bag deployment in low speed vehicle crashes that would otherwise call for low-output air bag deployment in the suspect vehicles may increase the risk of injury to front seat vehicle occupants during a crash.** 

#### HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA will repair your vehicle <sup>[2]</sup> free of charge (parts and labor). To do this, your dealer will replace the ORC module. The estimated repair time is one hour. 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 <u>www.fcarecallreimbursement.com</u> 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

<sup>[1]</sup> 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.

<sup>[2]</sup> 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.

<sup>[3]</sup> 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.