

This bulletin provides the procedure to inspect for complete insertion and locking of the six (6) Battery Management System (BMS) module connectors on some 2017MY Niro (DE) vehicles, produced from November 1, 2016 to January 13, 2017. Follow the procedure outlined in this bulletin to inspect and if necessary, correct the connector installation. Kia is requesting the completion of this Service Action on all affected vehicles in dealer stock, prior to delivery. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



# **\*** NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on WebDCS (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry  $\rightarrow$  Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs  $\rightarrow$  Not Completed Recall  $\rightarrow$  Recall VIN  $\rightarrow$  Select Report), which includes a list of affected vehicles.

This issue number is <u>SA284.</u>

### File Under: <Electrical>

Circulate To:	🛛 General Manager	Service Manager	🛛 Parts Manager
Service Advisor	s 🛛 Technicians	Body Shop Manager	☐ Fleet Repair

SUBJECT:

### **Inspection Procedure:**

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When performing this procedure, follow all EV battery safety precaution procedures found in the "General Information  $\rightarrow$  General Safety Information and Caution" chapter in the Shop Manual on KGIS and wear all required Personal Protection Equipment (PPE). Failure to follow the safety instructions may result in serious electrical injuries.

 Perform the High Voltage Shut-off Procedure by referring to "General Information → High Voltage Shut-off Procedure (steps 1 through 5)" chapter in the Shop Manual on KGIS.

### **A** DANGER

Failure to follow the High Voltage Shut-off Procedure may result in serious electrical injuries.

2. Remove the two (2) rear seat retaining bolts (A) and remove the rear seat.





3. If equipped, disconnect the rear seat heater connector (B) located under the left rear seat.



## BMS MODULE CONNECTOR INSPECTION (SA284)

4. Remove the carpet fastener (C) using a fastener removal tool.

5. Partially remove the left rear door frame weather strip (D).

6. Remove the left scuff trim retaining screw and remove the left scuff trim (E).

7. Remove the two (2) cooling duct retaining screws (F) and remove the cooling duct.







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### BMS MODULE CONNECTOR INSPECTION (SA284)

8. Remove the right rear door scuff trim retaining screw then without removing the weather strip, partially remove the scuff trim (G).

9. Remove the two (2) rear high voltage battery (HVB) frame retaining bolts (H) and nuts (I).

10. Remove the two (2) HVB frame side retaining bolts (J) located on each side.

11. Remove the four (4) front HVB frame retaining nuts (K) and remove the HVB frame (L).







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### BMS MODULE CONNECTOR INSPECTION (SA284)

 Remove the HVB lower frame retaining bolt (M) and two (2) retaining nuts (N) at all four (4) HVB frame brackets (O) and remove the four (4) HVB frame brackets.

13. Remove the top three (3) HVB left side cover (P) retaining bolts.

14. Remove the lower two (2) HVB left side cover retaining bolts and remove the HVB left side cover (P).

15. Remove the top four (4) HVB top cover (Q) retaining bolts and the top two (2) retaining nuts.









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### BMS MODULE CONNECTOR INSPECTION (SA284)

 Remove the three (3) bottom HVB top cover (Q) retaining nuts and remove the HVB top cover.

17. With the BMS exposed, inspect all six (6) connectors (R). Ensure the connectors are completely inserted and locked by lightly pulling on each connector. If the connector is loose and pulls out, properly reinsert and lock the connector and ensure a click sound is heard.

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Both connectors shown (T) are difficult to insert and lock. Ensure these connectors are properly installed. An improper and/or loose connector may result in a MIL illumination and/or render the vehicle inoperable.

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Use caution not to push on the Voltage Protection Device (VPD) (S) as it may set DTCs: P18A7 (Battery Overcharge Detection Active) and P1B77 (HV Pre-Charge Fault) and result in an inoperable vehicle.

18. Start the vehicle and confirm proper operation of the vehicle.









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### BMS MODULE CONNECTOR INSPECTION (SA284)

 Using the KDS, search and erase any DTCs stored that may have been set due to a loose BMS connector and ensure there are no further DTCs set.



20. Reinstall all removed components in the reverse order of removal. Be sure to reinstall the Safety Plug removed in step 1 of this procedure.



Use caution not to damage any interior components and interior trim panels and avoid soiling any interior trim components. Ensure the interior is clean of residue and prints.

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### **BMS MODULE CONNECTOR INSPECTION (SA284)**

### AFFECTED VEHICLE RANGE:

Model	Production Date Range	
Niro (DE)	November 1, 2016 to January 13, 2017	

Qty.

0

### WARRANTY INFORMATION:

#### N CODE: N99 C CODE: C99 Claim Repair Labor Op **Replacement** Causal P/N Qty. Type Description **Op Code** Time P/N (SA284) 1.0 V 37513 G2100 0 **BMS** Connector 170016R0 N/A M/H Inspection

# \* NOTICE

There are unique Hybrid service procedures, Hybrid special service tools, and Hybrid service training requirements that must be employed for safe and effective Hybrid vehicle repair. All Hybrid warranty repairs must be completed by Hybrid trained service technicians. Completion of this repair must be done by a Certified Hybrid Technician for the corresponding warranty claim to be paid. Refer to Warranty SPPM Section 7.24 Hybrid (HEV) Vehicle Service Handling Procedures.

### **\*** NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA284</u> when accessing the WebDCS system.