



GROUP

MODEL

Product Improvement

2020-2021MY
Niro EV (DE EV)

NUMBER

DATE

PI2603Y

July 2026

TECHNICAL SERVICE BULLETIN

SUBJECT:

BSA REPLACEMENT (PI2603Y)

This bulletin provides information related to the Technical Service Bulletin previously published under PI2603, titled "BMS Battery Diagnostic Logic Improvement." If one or more of the Diagnostic Trouble Codes (DTCs) listed in the table below are present or stored after the Battery Management System (BMS) software upgrade has been performed per PI2603, follow the procedure outlined in this publication to replace the Battery System Assembly (BSA) on the applicable vehicle. Before conducting the procedure, verify that the vehicle has completed the BMS software upgrade and is included in the list of affected VINs.

DTC	Description
P1AA700	Cell Voltage Deviation
P1AA800	Isolation Fault
P1AA900	Cell Voltage Variance
P1AAA00	Charging(CV) Voltage Deviation
P1AAB00	Pack Over Temperature
P1AAC00	Cell Over Voltage
P1AAD00	Cell Under Voltage
P1AAE00	Pack Temperature Deviation
P1AAF00	Moving Average Voltage Deviation
P1AB000	Relaxation Delta Voltage
P1AD800	Detecting dQ/dV Transition

Note: Product Improvement PI2603 must be completed prior to inspecting vehicles under PI2603Y.

 NOTICE

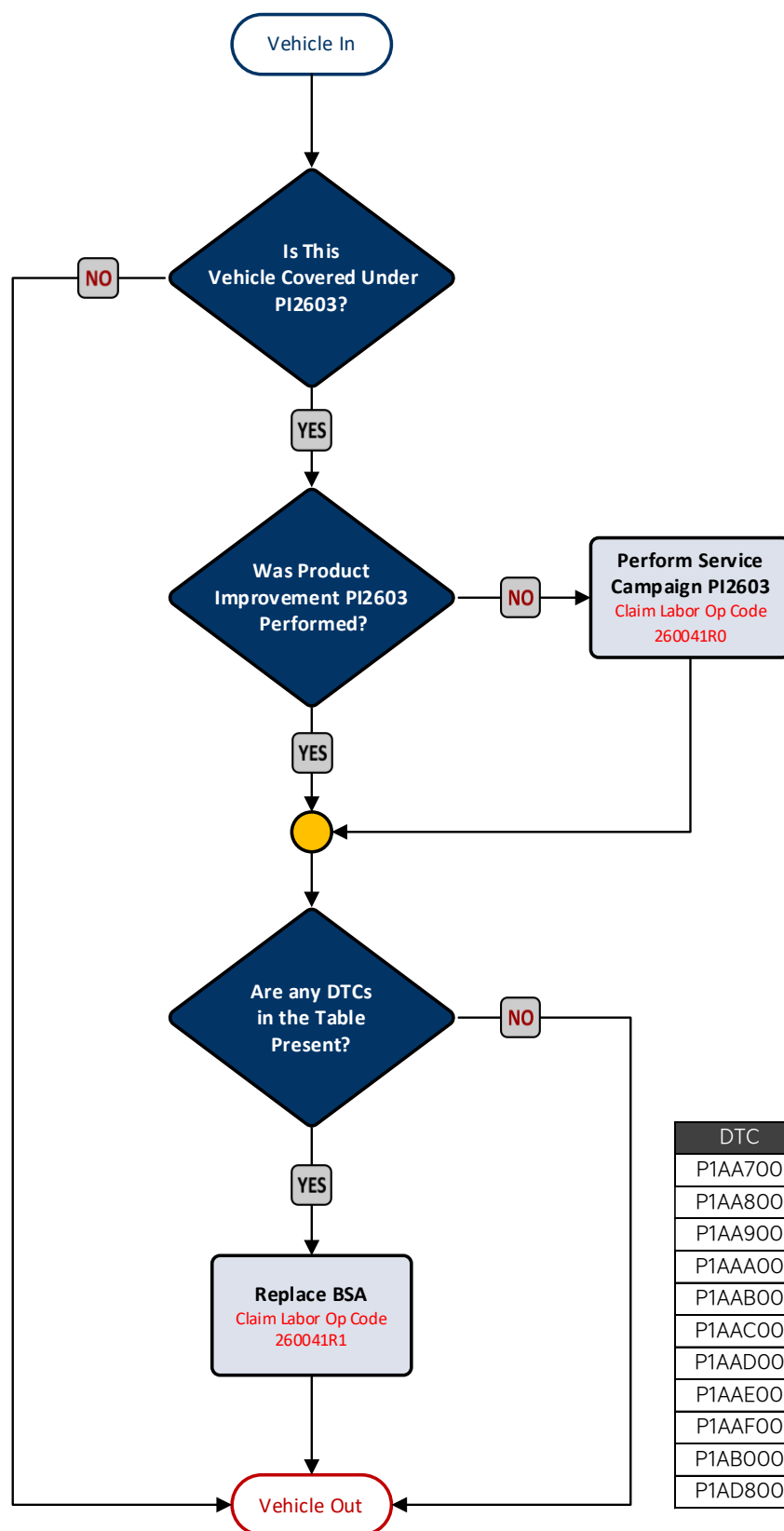
A Product Improvement Campaign is a repair program with customer notification. There is no charge to the vehicle owner for this repair.

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

This issue number is PI2603Y.

A printed copy is for reference only; publication information can be updated at any time.
Always refer to KGIS for the latest information. After logging in kdealer.com, the newest technical publications are listed in 'Service Releases' and has the latest service information that has been released.

Flowchart:



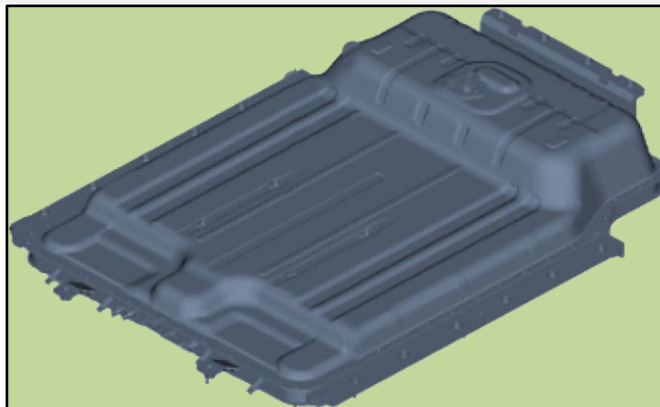
DTC	Description
P1AA700	Cell Voltage Deviation
P1AA800	Isolation Fault
P1AA900	Cell Voltage Variance
P1AAA00	Charging(CV) Voltage Deviation
P1AAB00	Pack Over Temperature
P1AAC00	Cell Over Voltage
P1AAD00	Cell Under Voltage
P1AAE00	Pack Temperature Deviation
P1AAF00	Moving Average Voltage Deviation
P1AB000	Relaxation Delta Voltage
P1AD800	Detecting dQ/dV Transition

SUBJECT:

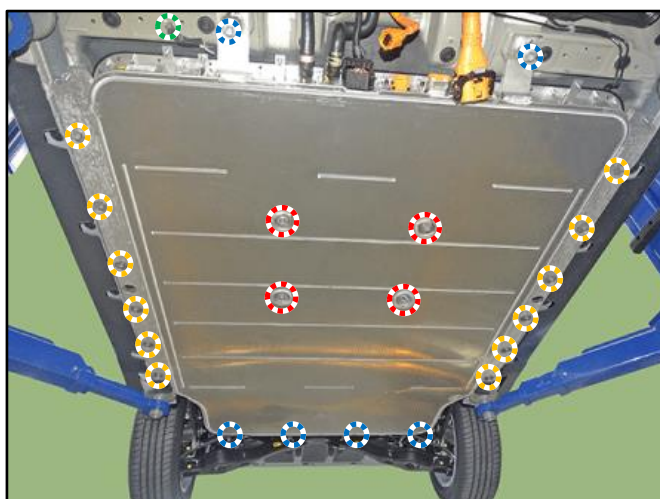
BSA REPLACEMENT (PI2603Y)

Repair Procedure:

1. Replace the BSA by referring to "Battery Control System (150 kW) (EV Battery System) → High Voltage Battery System → Repair Procedures - Removal" in the applicable Shop Manual on KGIS.

**ⓘ IMPORTANT**

Torque the BSA mounting bolts and the ground cable bolt to the specifications listed in the table below.



Torque Specifications for BSA Mounting Bolts

Bolt	Location	Qty.	lb.ft	N.m	Symbol
A	High Voltage Battery System Assembly Center Mounting Bolts	4	57.9 - 72.3	78.5 - 98.1	
B	High Voltage Battery System Assembly Side Mounting Bolts	12	126.5 - 133.8	120.6 - 181.4	
C	High Voltage Battery System Assembly Front Mounting Bolts	4	57.9 - 72.3	78.5 - 98.1	
D	Ground Cable Bolt	1	7.2 - 8.7	9.8 - 11.9	

2. Reinstall all removed parts in reverse order of removal.
3. Confirm normal operation.

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BSA REPLACEMENT (PI2603Y)

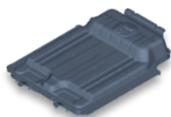
AFFECTED VEHICLE RANGE:

Model	Production Date Range
Niro EV (DE EV)	June 2, 2020, to November 08, 2021

REQUIRED TOOL:

Tool Name	Part Number	Figure	Location	Comments
Air Bleeding Tool	09580-3D100		Drawer 16	N/A

REQUIRED PART:

Part Name	Part Number	Figure	Qty.	Comments
BSA	37501 Q4151AS		1	Refer to TSB ELE044R5 for ordering and return procedures
Coolant	UM020 CH263	N/A	4 gal.	Premix (Pink)

Note: The replacement part numbers will require a VIN entry for parts ordering. **DO NOT** order these parts for stocking purposes, related to this TSB. Supply is very limited. Until supply stabilizes, please confirm part availability before scheduling customers. Please be sure to expedite warranty claim filing.

WARRANTY INFORMATION:

N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V	37501 Q4151	0	(PI2603Y) BSA Replacement	260041R1	2.5 M/H	37501 Q4151AS	1
						UM020 CH263	4

Note: Product Improvement PI2603 must be completed prior to inspecting vehicles under PI2603Y.

Refer to [Warranty Bulletin 2026-22](#) for claim submission procedures

When substitute transportation is provided, manually enter sublet code 'X2' for rental expense reimbursement or one roundtrip rideshare expense.

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **PI2603Y** when accessing the KDealer+ system.