



GROUP

MODEL

ELE

2023MY  
Niro EV (SG2 EV)

NUMBER

DATE

280 (Rev 1, 01/25/2023)

January 2023

## TECHNICAL SERVICE BULLETIN

SERVICE ACTION: EV BATTERY COOLANT  
AIR BLEEDING PROCEDURE (SA522)

SUBJECT:

## NOTICE

**This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.**

This bulletin provides information to perform the 'Battery EWP Operation Mode for Degassing and Circulation' (battery coolant air bleeding procedure) on the Battery Management System (BMS) for some 2023MY Niro EV (SG2 EV) vehicles produced from July 11, 2022 through November 20, 2022, which may have inadvertent air trapped inside of the coolant line due to BMS software logic error of the heater relay, which may generate an MIL 'ON' with DTC P1BA800 stored. Kia is requesting the completion of this Service Action on all affected vehicles in dealer stock, prior to delivery. Follow the procedure outlined in this publication to perform the air bleeding procedure on the battery coolant line. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

## DTC Description:

P1BA800 : Heater Relay Fault

## 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 → Warranty Coverage → Warranty Coverage Inquiry → Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs → Not Completed Recall → Recall VIN → Select Report), which includes a list of affected vehicles.

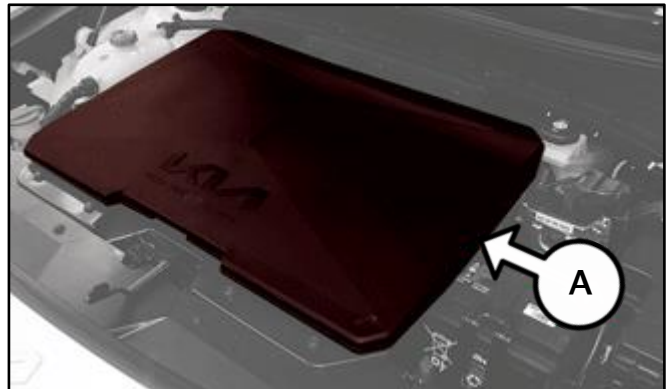
This issue number is SA522.

**Repair Procedure:**

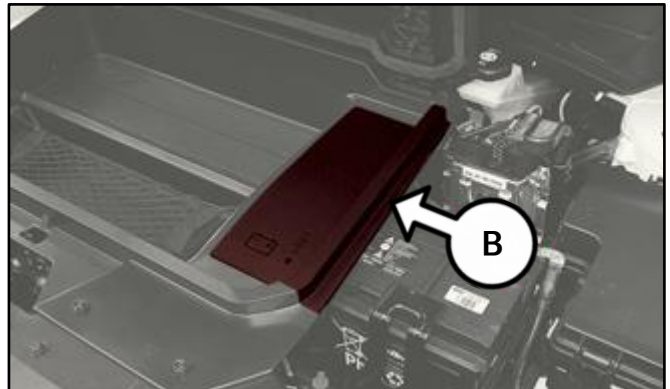
1. Open the hood.



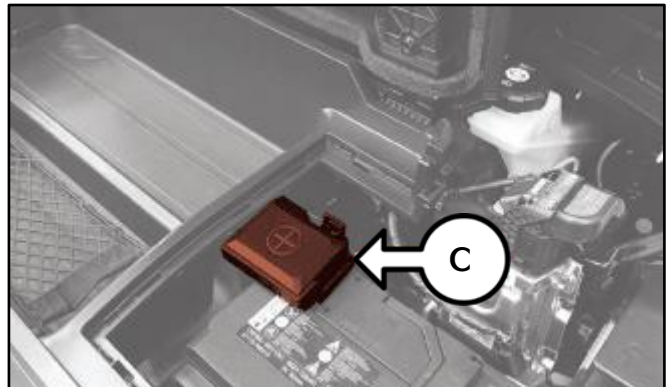
2. Open the front trunk (A).



3. Remove the service cover (B).



4. Open the auxiliary 12V battery positive (+) terminal cover (C).



5. Confirm a fully charged battery (12.3 volts or higher is necessary) is used and utilize a fully charged jump starter box connected to the battery.

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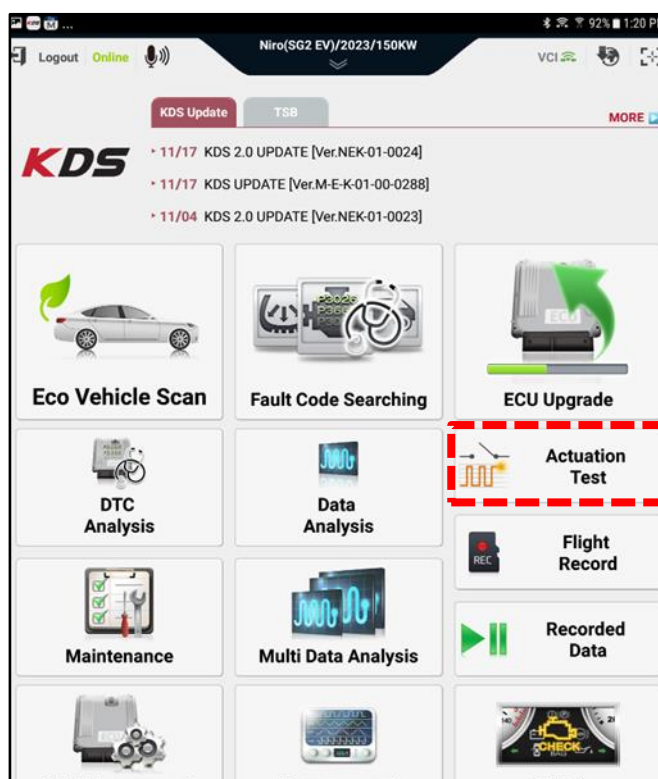
6. Attach a small strip of no-residue tape on the coolant reservoir to mark the current coolant level.



7. Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.



- 8a. Verify DTC P1BA800 is not stored.
- 8b. If stored, clear the DTC.
9. From the Home screen on KDS, select 'Actuation Test'.



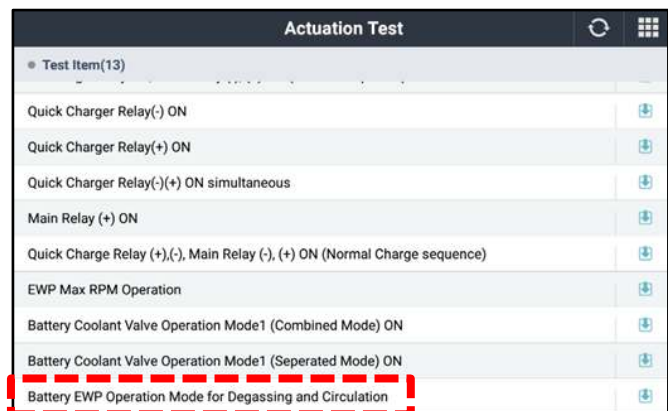
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10. Select 'BMS' System.
11. Select 'OK'.



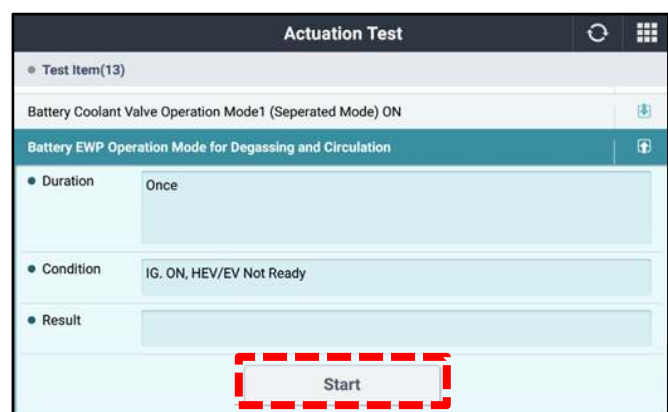
12. Select 'Battery EWP Operation Mode for Degassing and Circulation'.

Note: Electric Water Pump (EWP)



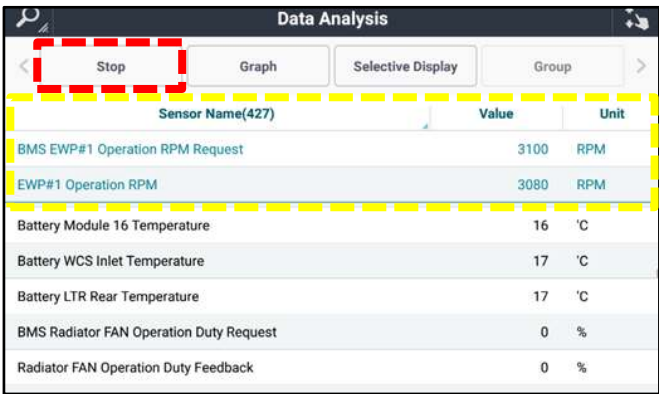
13. Select 'Start' to begin test.

Note: Allow the EWP operation to run for twenty (20) minutes.



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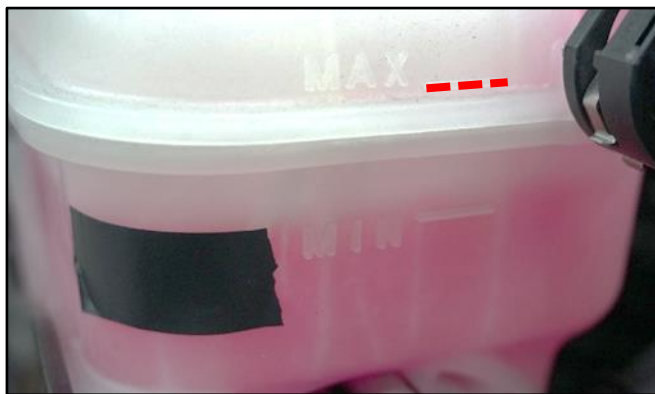
14. Select 'Stop' after 20 minutes of operation.



The screenshot shows a 'Data Analysis' window with a table of sensor data. The 'Stop' button in the top navigation bar is highlighted with a red dashed box. The table lists various sensors and their current values and units.

| Sensor Name(427)                        | Value | Unit |
|-----------------------------------------|-------|------|
| BMS EWP#1 Operation RPM Request         | 3100  | RPM  |
| EWP#1 Operation RPM                     | 3080  | RPM  |
| Battery Module 16 Temperature           | 16    | °C   |
| Battery WCS Inlet Temperature           | 17    | °C   |
| Battery LTR Rear Temperature            | 17    | °C   |
| BMS Radiator FAN Operation Duty Request | 0     | %    |
| Radiator FAN Operation Duty Feedback    | 0     | %    |

15. Inspect the coolant level. If coolant level is lower than the tape marking, refill coolant level to the 'MAX' line.



16. Reinstall all removed parts in the reverse order of removal.
17. Verify normal vehicle operation.

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**AFFECTED VEHICLE RANGE:**

| Model            | Production Date Range              |
|------------------|------------------------------------|
| Niro EV (SG2 EV) | July 11, 2022 to November 20, 2022 |

**REQUIRED TOOL:**

| Tool Name         | Figure                                                                            | Comments              |
|-------------------|-----------------------------------------------------------------------------------|-----------------------|
| 'No Residue' Tape |  | Locally Sourced       |
| KDS               |  | Kia Diagnostic System |

**REQUIRED PART:**

| Part Name | Part Number | Figure                                                                              | Qty.                 |
|-----------|-------------|-------------------------------------------------------------------------------------|----------------------|
| Coolant   | UM020 CH263 |  | As needed to top off |

**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 CV051 | 0    | (SA522)<br>Battery Coolant<br>Air Bleeding + Refill<br>(DTC P1BA800 Stored)    | 220145R0      | 0.5<br>M/H | N/A             | 0    |
|            |             |      | (SA522)<br>Battery Coolant<br>Air Bleeding + Refill<br>(No DTC P1BA800 Stored) | 220145R1      | 0.5<br>M/H | N/A             | 0    |

**Note:** For coolant top off and locally sourced 'no residue' tape, use sublet code 'X1' with a maximum allowed amount of \$9.70 per vehicle to complete ELE280/SA522.

**NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SA522** when accessing the WebDCS system.