



|                                   |                          |
|-----------------------------------|--------------------------|
| GROUP                             | MODEL                    |
| <b>Voluntary Service Campaign</b> | <b>2025MY EV6 (CV1a)</b> |
| NUMBER                            | DATE                     |
| <b>SC343 (Rev 1, 11/18/2025)</b>  | <b>June 2025</b>         |

## VOLUNTARY SERVICE CAMPAIGN

### PDC LOGIC IMPROVEMENT AND PRA REPLACEMENT FOR DTC P1B7700 (SC343)

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 upgrade the Powernet Domain Control 'PDC' system software on certain 2025MY EV6 (CV1a) vehicles produced from December 10, 2024 through June 24, 2025, built at a Kia assembly plant in the US. Due to a PDC software logic error in the subject vehicle, the pre-charge resistor may become damaged if the vehicle is abnormally turned 'OFF' (e.g. turned 'OFF' while the gear selection is in 'Neutral'). If the pre-charge resistor becomes damaged, the vehicle may not go into 'READY' mode. Customers may experience the illumination of the service warning light, and the vehicle may set DTC P1B7700. If DTC P1B7700 is stored, technicians are to replace the PRA before upgrading the 'PDC' software. Follow the procedure outlined in this publication to apply the improved logic to the 'PDC' system **in 'Service Mode'** using the KDS ECU Upgrade function as described in this bulletin. Refer to [SST081](#) for software upgrade instructions using Kia Diagnostic System (KDS) tablet and VCI-II and confirm the Upgrade Event Number/Name, ROM ID Information, and Manual Mode passwords (if applicable) on the applicable vehicle.

This software upgrade may also be available via an Over-the-Air (OTA) update on vehicles with an 'active' Kia Connect subscription.

#### DTC Description:

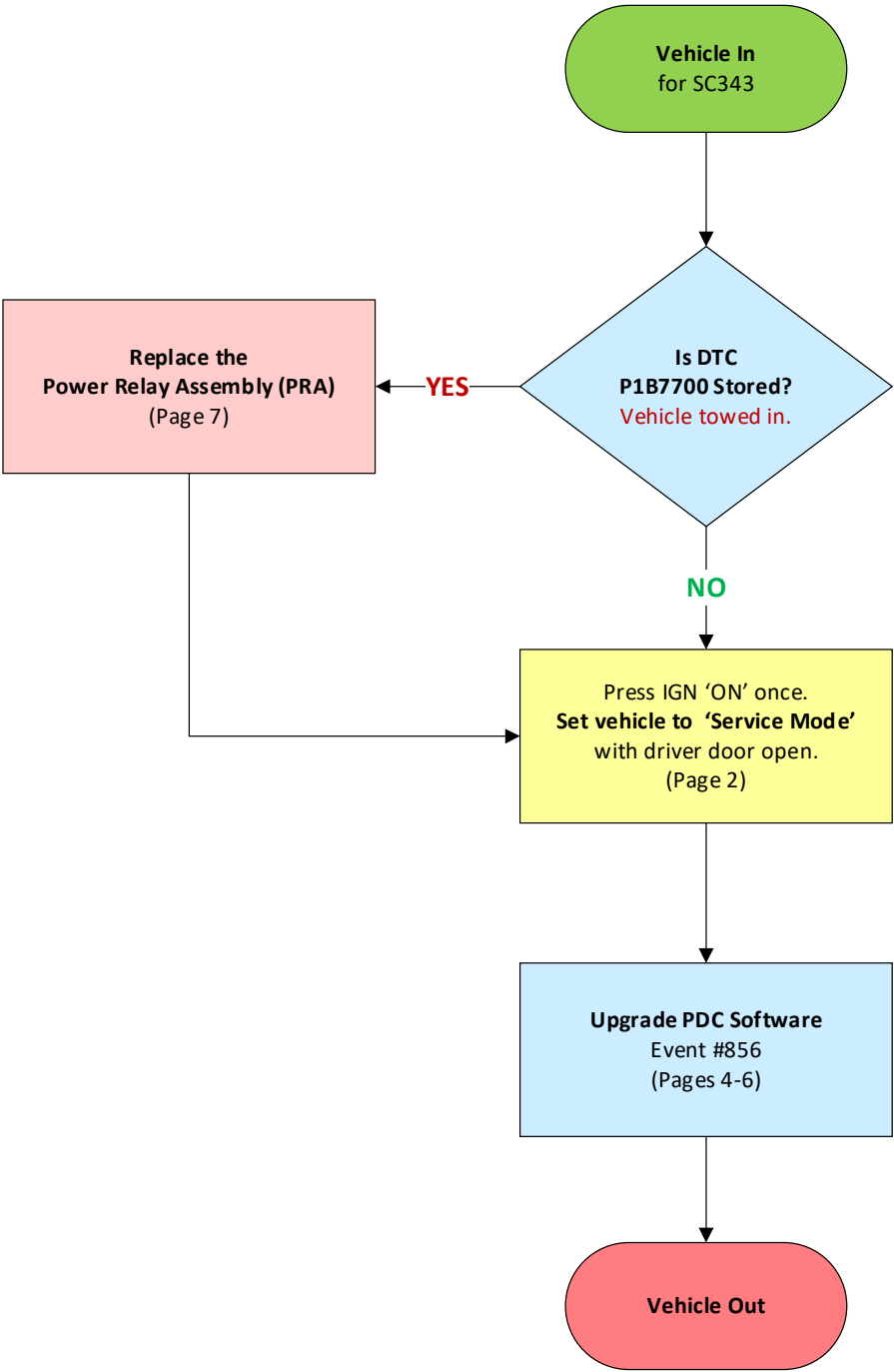
#### P1B7700 - Inverter Capacitor Precharging Fault

#### NOTICE

**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 SC343.**

Flowchart :



SUBJECT:

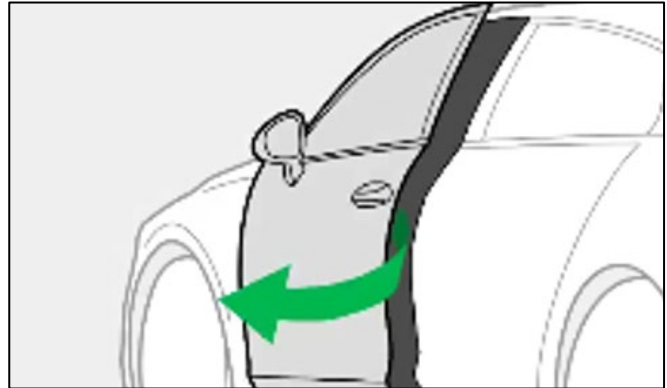
## PDC LOGIC IMPROVEMENT (SC343)

**'Service Mode' Setting Procedure :**

1. Open the driver door.

**ⓘ IMPORTANT**

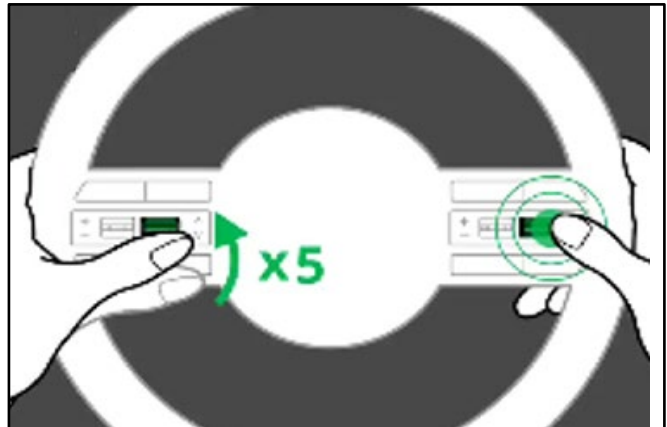
Keep the left driver door open throughout the following steps.



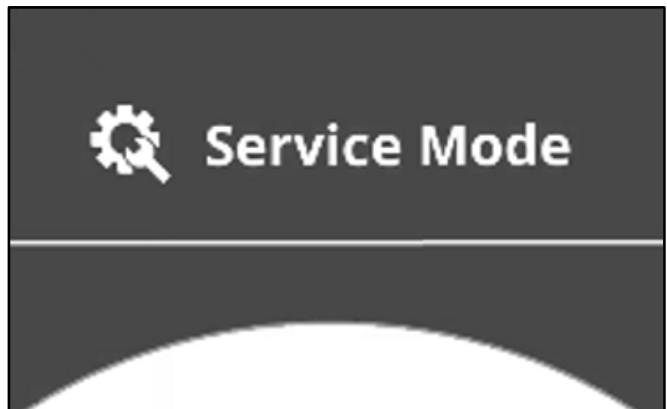
2. Press the ignition 'Power ON' button once (without depressing the brake pedal).



3. Press and hold the right side 'MUTE' button down on the steering wheel while pressing the left side 'UP/DOWN' button UPWARDS five (5x) times.



4. Confirm the vehicle is set to '**Service Mode**' in the instrument cluster display.



5. Proceed to upgrade the PDC software by following the instructions in the '**Software Information**' on page 6.

Refer to [TSB SST081](#) for instructions to upgrade the 'PDC' system:

To correct this condition, the specified system module should be reprogrammed using KDS as described in this bulletin in 'Auto Mode'.

Upgrade Event Name

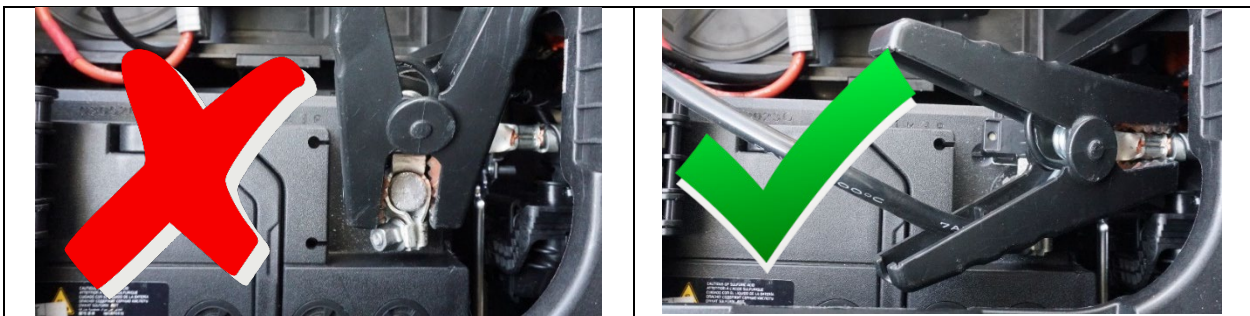
856.CV1a PE PDC Logic Improvement (EV Ready Failure & DTC P1B77)

Apply in 'Service Mode' (Refer to Page 3)


#### NOTICE

- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize a fully charged jump starter box connected to the battery.
- **Ensure the KDS GDS is sufficiently charged at 60% or higher prior to reflash.**
- All ECU upgrades must be performed with the ignition set to the 'ON' position unless otherwise stated.
- **Damaged VCI II units should not be used and promptly replaced.**
- Be careful not to disconnect the VCI-II connected to the vehicle during the ECU upgrade procedure.
- **DO NOT start the engine during ECU upgrade.**
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- **When the ECU upgrade is completed, turn the ignition 'OFF' and wait 10 seconds before starting the engine.**
- ONLY use approved ECU upgrade software designated for the correct application.

[Connect the negative \(-\) terminal to the battery as shown below.](#)



#### NOTICE

Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the applicable model is equipped with an immobilizer  security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback.

SUBJECT:

**PDC LOGIC IMPROVEMENT (SC343)****ROM ID Information Table:****Upgrade Event #856****ⓘ IMPORTANT**

It is recommended to ALWAYS check the Electronic Parts Catalog (EPC) to locate the ECU Part Number respective to Auto/Manual Mode ROM IDs. DO NOT reference the parts label affixed to the ECU.

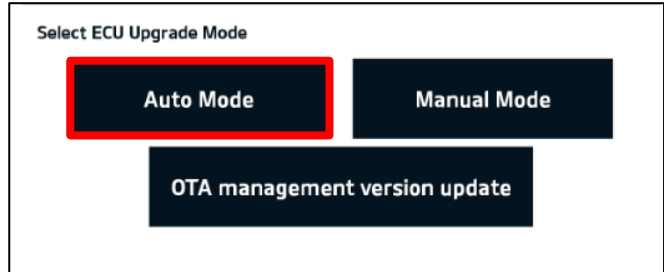
| Model | System | ECU P/No.                  | ROM ID       |      |
|-------|--------|----------------------------|--------------|------|
|       |        |                            | Previous     | New  |
| CV1a  | PDC    | 91960 XG000<br>91960 XG010 | 2471<br>2491 | 2521 |

To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECM ROM ID and reference the Information Table as necessary.

**Software Information:**

The required software must be installed by selecting the **'Auto Mode'** ECU Upgrade option while in 'Service Mode' (page 3).

**Note:** In some case, the 'Manual Mode' installation option may be required ONLY if the 'Auto Mode' function fails or is otherwise noted above.



**❶ IMPORTANT**

The software update may also be available via **Over-The-Air (OTA)** upgrade feature through an 'active' Kia Connect account for customers. An OTA software upgrade may not be available at the time a TSB publication is released. Dealers can confirm OTA availability by checking for OTA release notes on the Kia [Owners Portal: OTA Software Update Release Notes](#). If the affected vehicle had the latest software installed via OTA, no further action is required by the dealer.

**Note:** An OTA installed software is time-stamped for each VIN.

**📄 NOTICE**

**If the automatic upgrade fails, turn the ignition 'OFF' for about 10 seconds then place it back in the 'ON' position to reset the control unit BEFORE performing the manual upgrade.**

'Manual Mode' passwords.

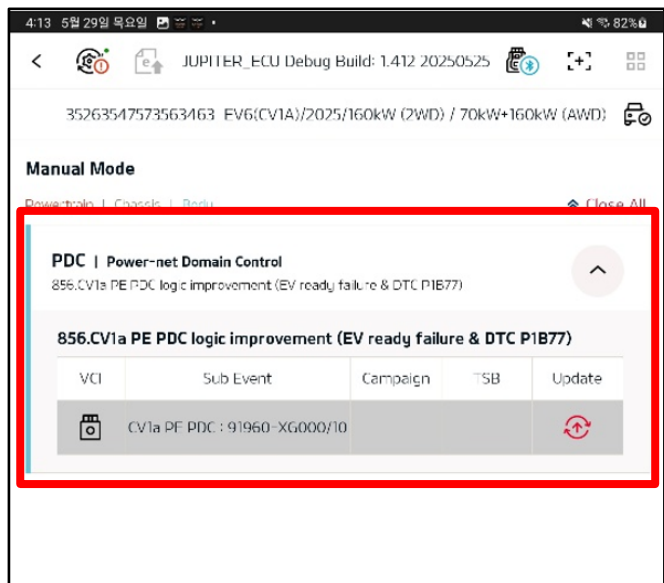
| Menu                         | Password |
|------------------------------|----------|
| CV1a PE PDC : 91960-XG000/10 | 0100     |

**UPGRADE EVENT:**

Select the applicable **'PDC' system** module and the Event Group.

- **856.CV1a PE PDC Logic Improvement (EV Ready Failure & DTC P1B77)**

Verify the affected vehicle Calibration Identification of the applicable ECU ROM ID and reference the Information Table on page 3 as necessary.



SUBJECT:

## PDC LOGIC IMPROVEMENT (SC343)

## Replacement Procedure: (PRA)

**DANGER**

When performing this procedure, follow all EV battery safety precaution procedures found in the “General Information → 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.

1. Replace the power relay assembly (PRA) (A) by referring to “Battery Control System → High Voltage Battery Control System → Power Relay Assembly → Removal and Installation” in the applicable Shop Manual on KGIS.

**DANGER**

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

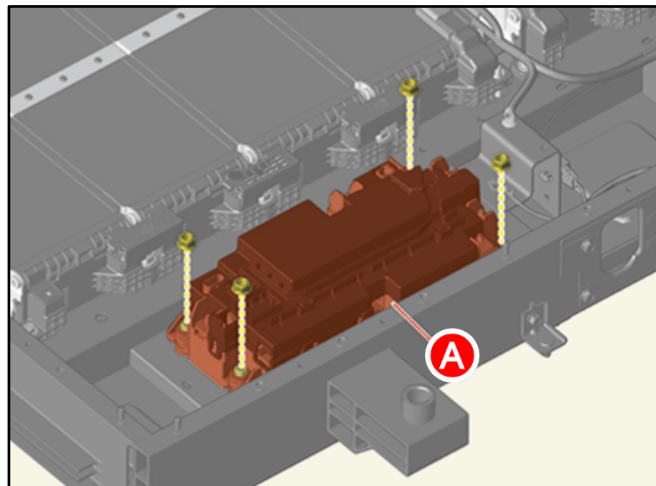
**WARNING**

DO NOT attempt to install the PDC software before replacing the PRA on the affected vehicle.

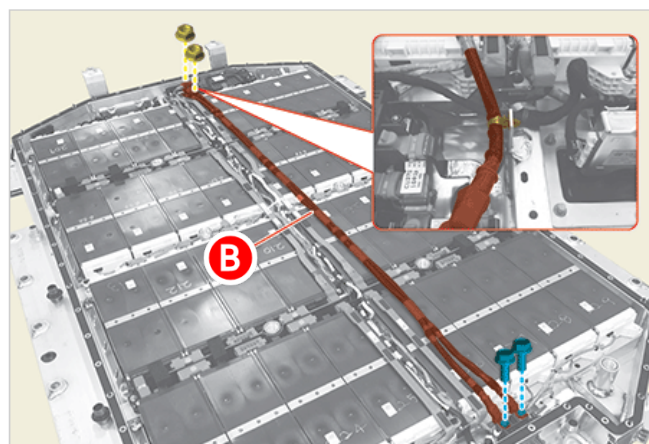
**NOTE:** The six (6) PRA Bus Bar (B) retaining bolts are not reusable. All bolts (x6) MUST be replaced with new parts.



Tightening torque for nut/bolt (X):  
5.8 - 8.7 lb.ft (7.8 - 11.8 N.m)



**HIGH VOLTAGE**  
Electrical Shock Hazard




2. Install the new PRA and all other removed parts in the reverse order of removal.
3. Proceed to upgrade the PDC software by following the instructions in the ‘Software Information’ on page 6 after installation of the new PRA is completed.

SUBJECT: **PDC LOGIC IMPROVEMENT (SC343)**

**AFFECTED VEHICLE RANGE:**

| Model      | Production Date Range                   |
|------------|---|
| EV6 (CV1a) | December 10, 2024 through June 24, 2025 |

**REQUIRED TOOL:**

| Tool Name                   | Part Number | Figure   | Comments  |
|-----------------------------|-------------|--|-----------|
| Kia Diagnostic System (KDS) | N/A         |  | KDS + VCI |

**REQUIRED PART:**

| Part Name    | Part Number | Figure | Qty. | Comments    |
|--------------|-------------|--------|------|-------------|
| PRA          | 37514 CU000 |        | 1    |             |
| Bus Bar Bolt | 375Z4 GI000 |        | 6    | Nonreusable |

**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. |
|------------|-------------|------|---|---------------|------------|-----------------|------|
| R          | 91960 XG010 | 0    | (SC343)<br>PDC Logic Improvement                      | 250A32R0      | 0.3<br>M/H | N/A             | 0    |
|            |             | 0    | (SC343)<br>PRA Replacement +<br>PDC Logic Improvement | 250A32R1      | 3.4<br>M/H | 37514 CU000     | 1    |
|            |             |      |   |               |            | 375Z4 GI000     | 6    |

**Note:** Refer to [Warranty Bulletin 2025-18](#) for claim submission procedures. When substitute transportation is provided, manually enter sublet code 'X2' for rental expense reimbursement or one roundtrip rideshare expense. Make sure to submit any substitute transportation claim at the time of the warranty expense.

**NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference [SC343](#) when accessing the KDealer+ system.

