



GROUP

MODEL

Voluntary Service
Campaign2025MY
EV6 (CV1a)

NUMBER

DATE

SC343 (Rev 1, 11/18/2025)

June 2025

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

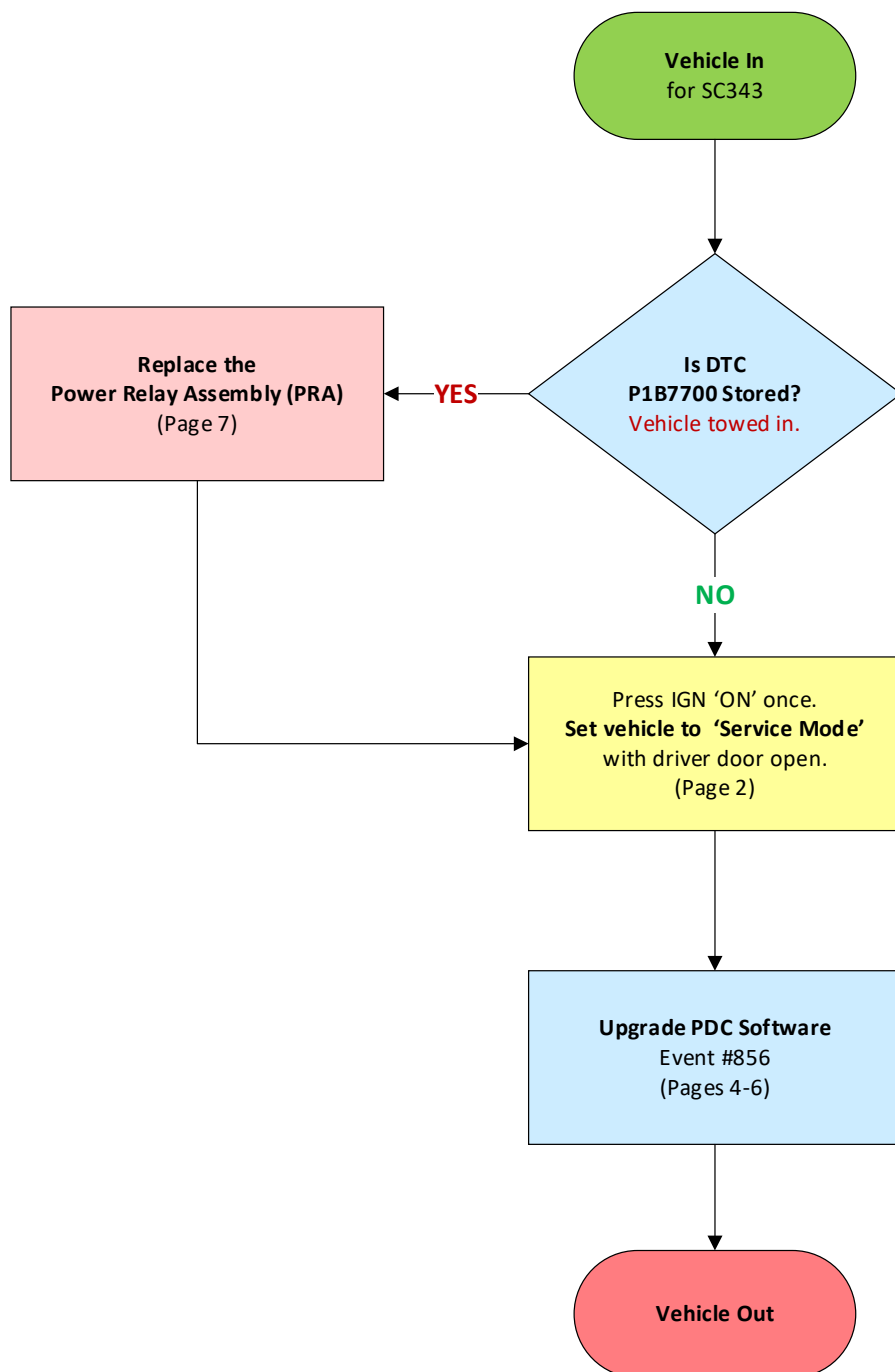
NOTICE

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.

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 :

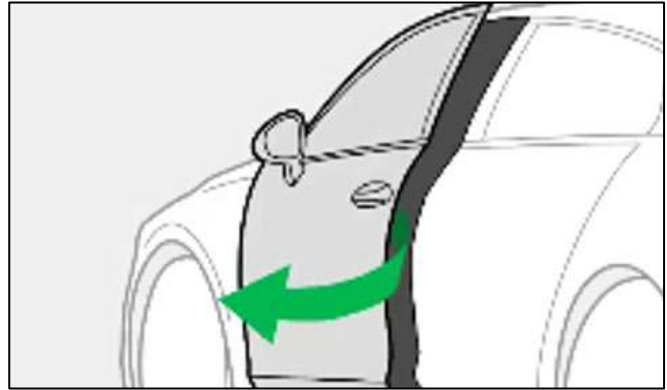


'Service Mode' Setting Procedure :

1. Open the driver door.

❗ IMPORTANT

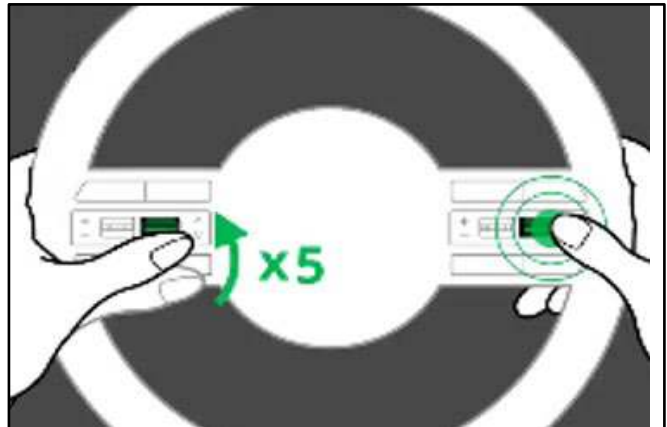
Keep the left driver door open throughout the following steps.



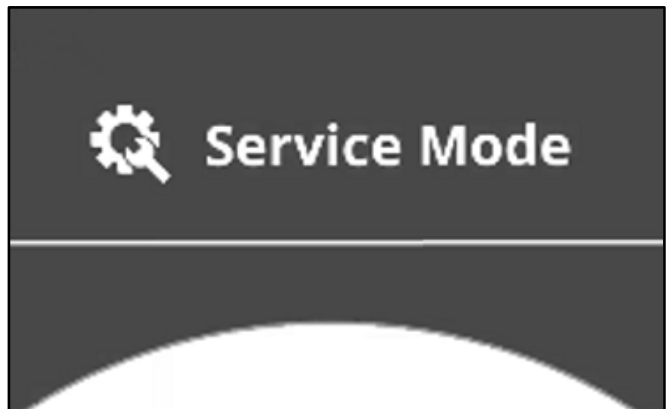
2. Press the ignition 'Power ON' button once (without depressing the brake pedal).



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

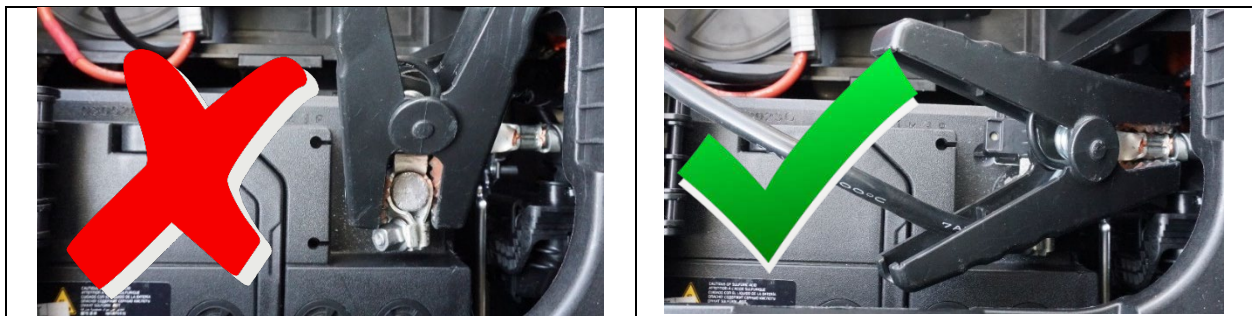
856.CV1a PE PDC Logic Improvement (EV Ready Failure & DTC P1B77)

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 91960 XG010	2471 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.

① 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.

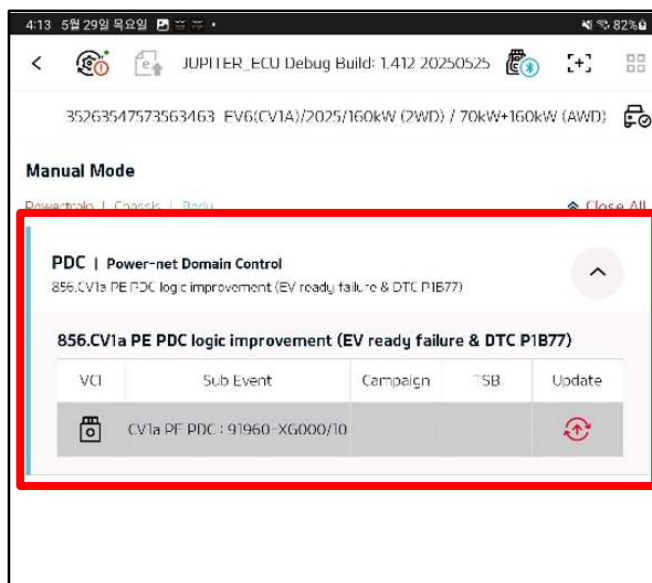
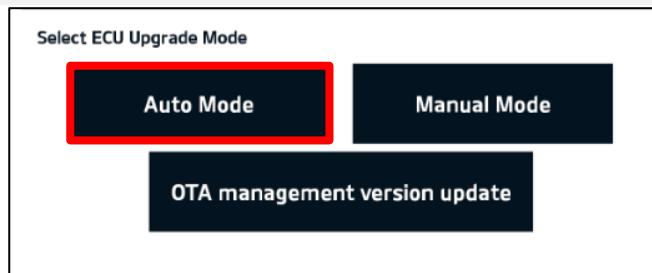
Menu	Password
CV1a PE PDC : 91960-XG000/10	0100

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.



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.

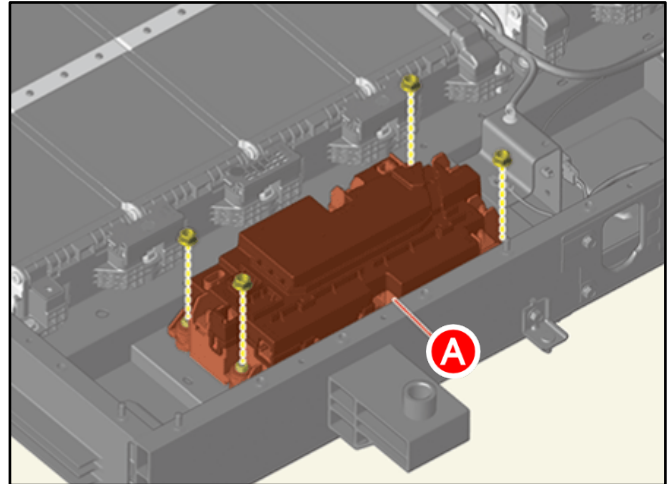
1. Replace the power relay assembly (PRA) (A) by referring to “Battery Control System → High Voltage Battery Control System → Power Relay Assembly → Removal and Installation” in the applicable Shop Manual on KGIS.

! 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.

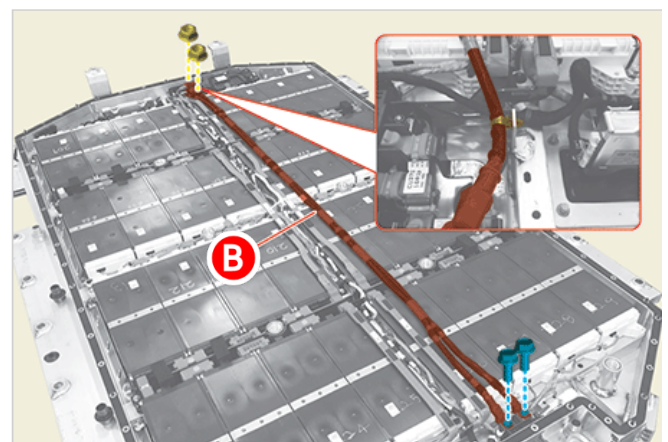


HIGH VOLTAGE
Electrical Shock Hazard

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)



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) PDC Logic Improvement	250A32R0	0.3 M/H	N/A	0
		0	(SC343) PRA Replacement + PDC Logic Improvement	250A32R1	3.4 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.