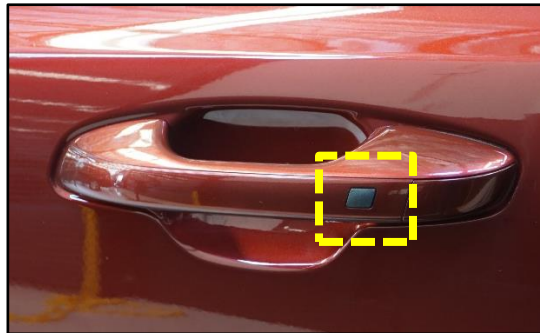|	GROUP	MODEL
![Kia logo]	ELE	2023MY Telluride (ON)
	NUMBER	DATE
	302	February 2024

TECHNICAL SERVICE BULLETIN

SUBJECT: SMART KEY OPERATION LOGIC IMPROVEMENT

This bulletin provides the procedure to upgrade the software of the Integrated Body Control Unit (IBU) system on some 2023MY Telluride (ON) vehicles produced from January 3, 2023 through June 5, 2023 equipped with Personal Identification Card (PIC) handles. The affected vehicles may exhibit an inoperative lock/unlock function with a potentially drained 12V battery. Follow the procedure outlined in this publication to upgrade the software of the 'IBU' system using the KDS ECU Upgrade function in Manual Mode only as described in this bulletin. For confirmation that the latest reflash has been applied to a vehicle you are working on, verify the ROM ID using the table on page 3 of this bulletin.

Button (PIC) Type

ⓘ **IMPORTANT**

The ECU **MUST** be reprogrammed in **Manual Mode Only** using the KDS download as described in this bulletin. **If the vehicle is equipped with a power tailgate**, the 15A 'Module 9' and 30A 'Power Tail Gate' fuses **MUST** be removed **PRIOR** to the reflash.

📄 **NOTICE**

A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

SMARK KEY OPERATION LOGIC IMPROVEMENT

ECU Upgrade Procedure:

To correct this condition, the ECU should be reprogrammed using the KDS download, as described in this bulletin.

Upgrade Event Name
686. ON PE IBU UPGRADE FOR SMART KEY OPERATION

📄 NOTICE

- Confirm a <u>fully charged battery</u> (12.3 volts or higher is necessary) is used <u>or</u> 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 <u>not</u> 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' <u>or</u> 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.

ⓘ 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.

Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

TSB: ELE302 Telluride (ON) February 2024

SUBJECT: SMARK KEY OPERATION LOGIC IMPROVEMENT

ⓘ IMPORTANT

The ECU **MUST** be reprogrammed in **Manual Mode ONLY** using the KDS download as described in this bulletin.

📄 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.

ROM ID INFORMATION TABLE:

Upgrade Event #686

Model	System	ECU P/No.	ROM ID	
			Previous	New
ON	IBU	954B0 S9040	1.03	1.05

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.

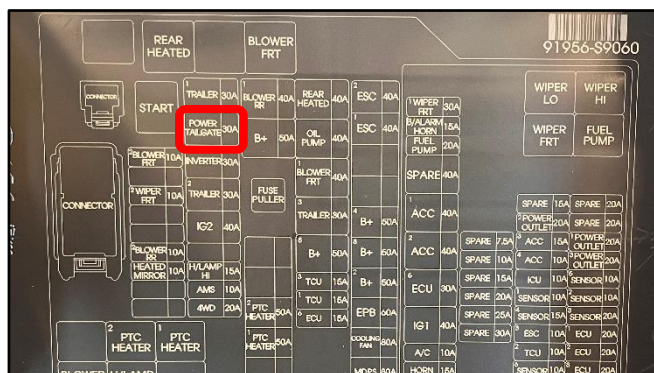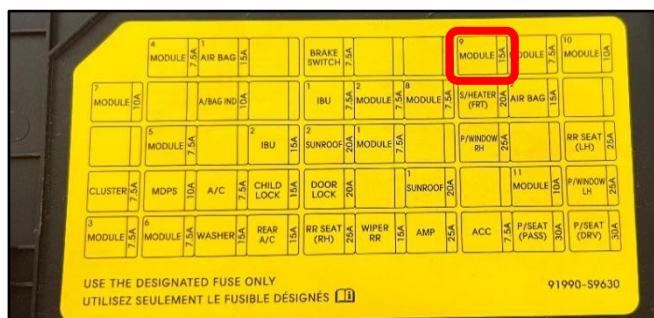### 📄 NOTICE

Prior to performing the ECU upgrade, be sure to check that the KDS is fully charged.

1a. If the vehicle **is** equipped with a power tailgate, remove:

- **15A 'Module 9'** fuse located in the driver's side fuse panel

   and

- **30A 'Power Tail Gate'** fuse located in the engine compartment fuse panel.

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SUBJECT: SMARK KEY OPERATION LOGIC IMPROVEMENT

1b. If the vehicle is **not** equipped with a power tailgate, proceed to step 2.

2. Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.
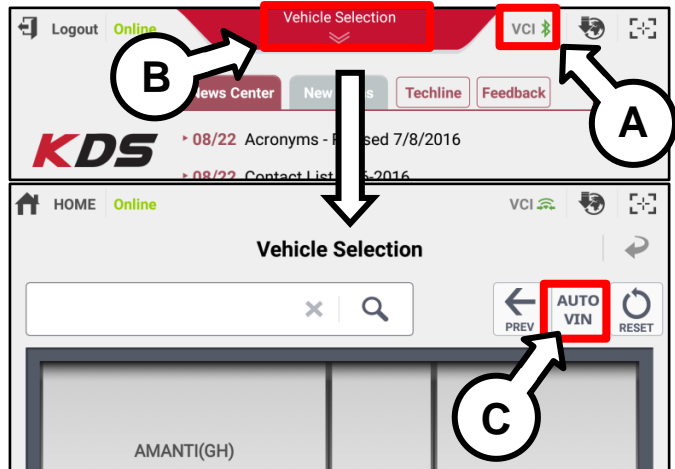
> 📄 **NOTICE**
>
> **The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.**
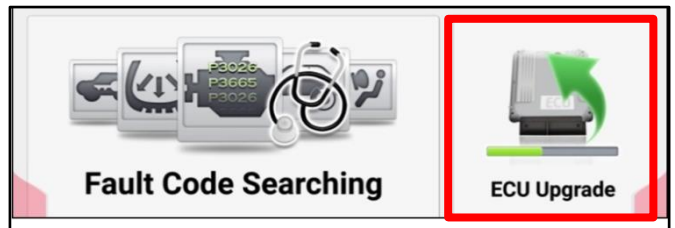

3. With the ignition **ON**, turn ON the KDS tablet. Select **'KDS'** from the home screen.

4. Confirm communication with VCI (A) and then configure the vehicle (B) using the **'AUTO VIN'** (C) feature.
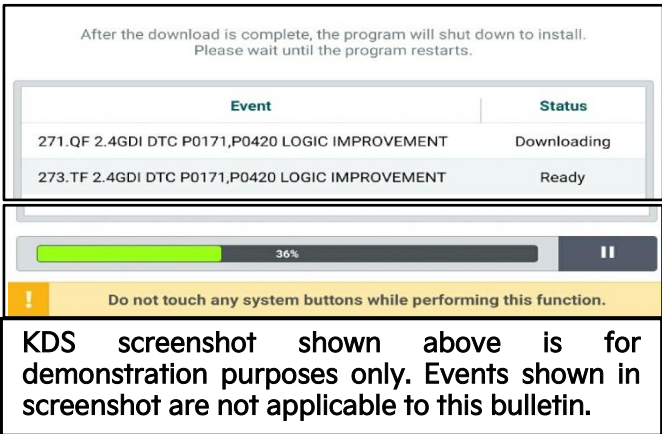

5. Select **'ECU Upgrade'**.

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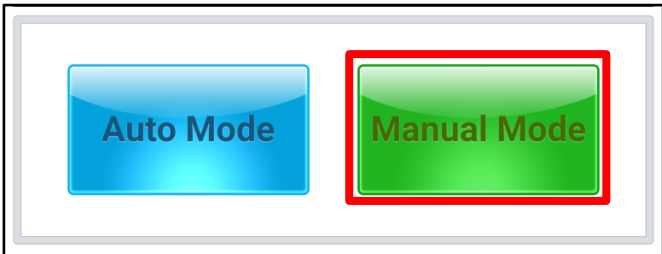| SUBJECT:	SMARK KEY OPERATION LOGIC IMPROVEMENT

6. The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #686**.

> **📄 NOTICE**
>
> **The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.**

After the download is complete, the program will shut down to install. Please wait until the program restarts.

Event	Status
271.QF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Downloading
273.TF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Ready

36%

! Do not touch any system buttons while performing this function.

KDS screenshot shown above is for demonstration purposes only. Events shown in screenshot are not applicable to this bulletin.
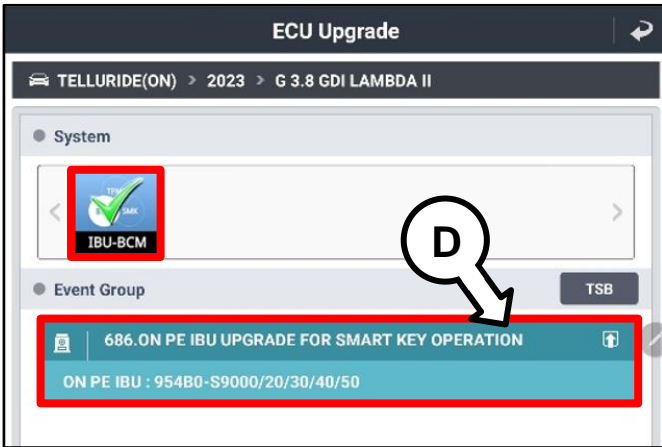
7. Select **Manual Mode**.

> **⚠️ CAUTION**
>
> **Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.**

Auto Mode   Manual Mode

8. Select the '**IBU-BCM**' system under the System selection menu and applicable Event Group (D).

686. ON PE IBU UPGRADE FOR SMART KEY OPERATION

ECU Upgrade

🚗 TELLURIDE(ON) > 2023 > G 3.8 GDI LAMBDA II

● System

IBU-BCM

D

● Event Group   TSB

686.ON PE IBU UPGRADE FOR SMART KEY OPERATION

ON PE IBU : 954B0-S9000/20/30/40/50

Manual Mode ECU Upgrade Password

Menu	Password
ON PE IBU : 954B0-S9040	6861

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.

2. Select the **IBU** system under the System selection menu. Select **Upgrade Event #686** and select **Upgrade** to continue.

3.   Select the appropriate control unit part number with reference to the ROM ID Information Table on page 3, and select **OK**.

4.   Enter the appropriate password from the Manual Mode password table above and select **OK**.

5.   The upgrade will begin and the progress of the upgrade will appear on the bar graph.

6.   When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Select **OK**.

7.   Once the upgrade is complete, select **OK** to finalize the procedure.

8.   When prompted, select **YES** to check for Diagnostic Trouble Codes (DTC) and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during the upgrade.

9.   Start the engine to confirm proper operation of the vehicle.

10. Reinstall the **15A 'Module 9'** and **30A 'Power Tail Gate'** fuses.

11. Start the engine to confirm normal operation of the vehicle.

SUBJECT:

SMARK KEY OPERATION LOGIC IMPROVEMENT

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Telluride (ON)	January 3, 2023 to June 05, 2023

REQUIRED TOOL:

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

WARRANTY INFORMATION:

N Code: D21   C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	954B0 S9040	0	Smart Key Operation Logic Improvement (Power Tail Gate)	954B0F05	0.4 M/H	N/A	0
			Smart Key Operation Logic Improvement (Non-Power Tail Gate)	954B0F06	0.3 M/H		

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