TECHNICAL SERVICE BULLETIN

SUBJECT:	SERVICE ACTION: IBU SMART TRUNK LOGIC IMPROVEMENT (SA390)

★ 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 the procedure to improve the logic of the Integrated Body Control Unit (IBU-BCM) on some 2019MY Forte (BDm) vehicles, produced from July 16, 2018 through June 3, 2019, which may exhibit improper function of the smart trunk operation and/or a parasitic battery draw. To correct this concern, apply the improved logic to the IBU using the KDS ECU Upgrade function 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 2 of this bulletin. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

⚠ CAUTION

Failure to follow this exact procedure may cause damage to the IBU-BCM and claims associated with this repair may be subject to chargeback.

★ 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 SA390.

File Under: <Electrical>

Circulate To: ☒ **General Manager**   ☒ **Service Manager**   ☒ **Parts Manager**

☒ **Service Advisors**   ☒ **Technicians**   ☒ **Body Shop Manager**   ☐ **Fleet Repair**

IBU Upgrade Procedure:

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

Upgrade Event Name
428. BDm IBU SMART TRUNK OPERATION LOGIC IMPROVEMENT

★ NOTICE

- **A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 be used in ECU mode during reflashing or the use of a fully charged jump starter box.**
- **DO NOT connect any other battery charger to the vehicle during ECU upgrade.**
- **Ensure the KDS or GDS is sufficiently charged prior to reflash.**
- **All ECU upgrades must be done with the ignition key in the 'ON' position.**
- **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 model and model year.**

★ NOTICE

Before attempting an ECU upgrade on any Kia model, make sure to first determine whether the particular 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 #428

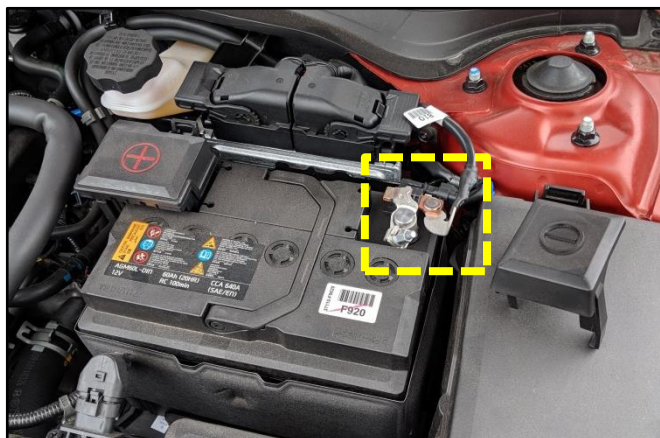| Model	System	IMMO	ECU P/No.	ROM ID	
				Previous	New
(BDm)	IBU/BCM	Yes 🔑	95400 M7190 95400 M7200 95400 M7240 95400 M7250 95400 M7320 95400 M7330	1.03	1.05

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.

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★ **NOTICE**

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

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1. Disconnect the negative (-) battery terminal for five (5) seconds <u>with the driver door open</u> and reconnect **before** performing the IBU-BCM logic improvement.

   Tightening torque for bolt:
   5.9 - 7.4 lb.ft (8 - 10 N.m, 0.8 - 1.0 kgf.m)

⚠ **CAUTION**

As a reminder, the KDS will prompt to disconnect the negative (-) battery cable with the driver door open as outlined in step 1 prior to performing IBU upgrade.

Information

Before start ECU upgrade, please, precede the condition as written below.

1. Driver's door must be open. And 12V battery (-) terminal must be disconnected for 5 seconds, and connect again, in order to reset IBU.

2. This upgrade must be performed Immediately After above condition (1) is done.
If you touch OK button, the upgrade is started automatically.
(In case IBU upgrade has not started within 3 minutes, please, repeat (1) condition.)

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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.
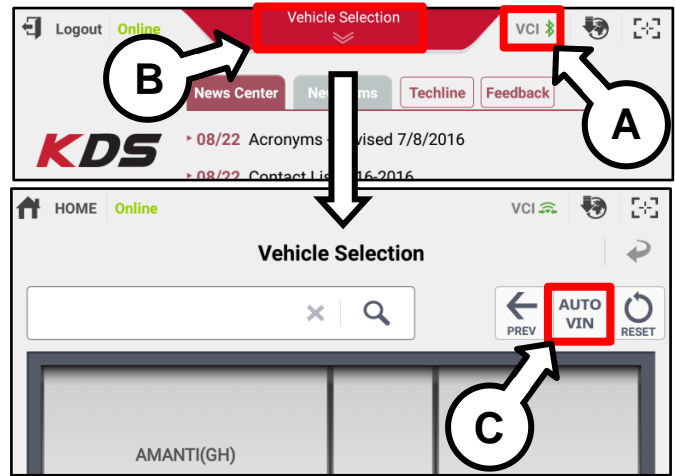

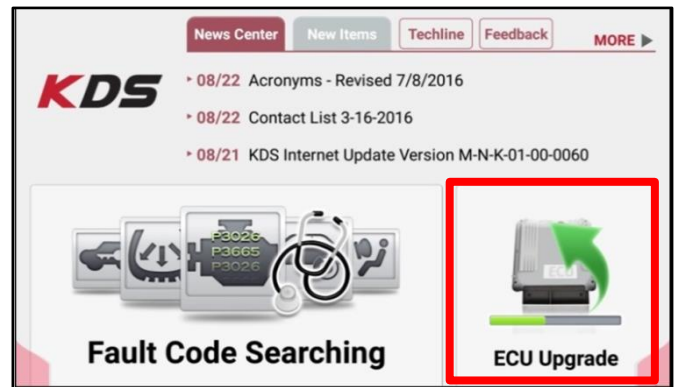3. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.

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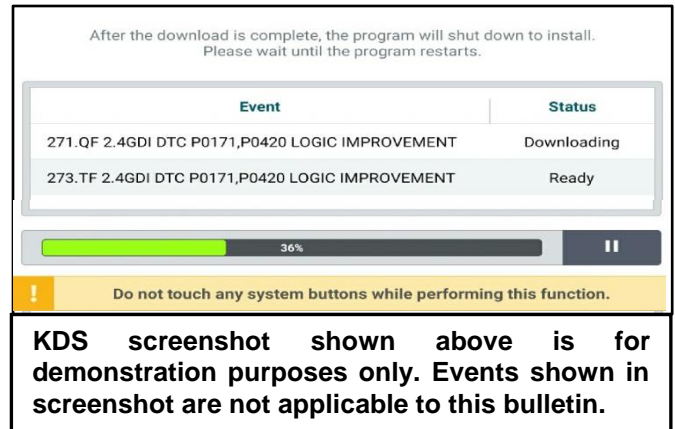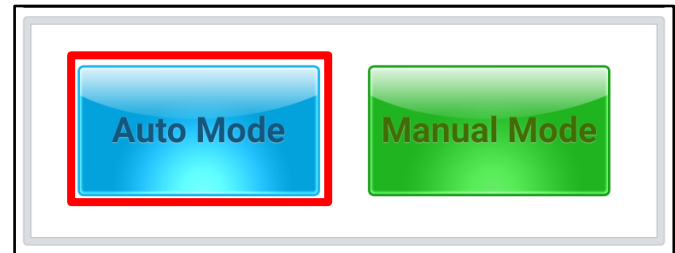
5. Select **ECU Upgrade**.

6. The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #428.**

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

KDS screenshot shown above is for demonstration purposes only. Events shown in screenshot are not applicable to this bulletin.

7. Select **Auto 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.**
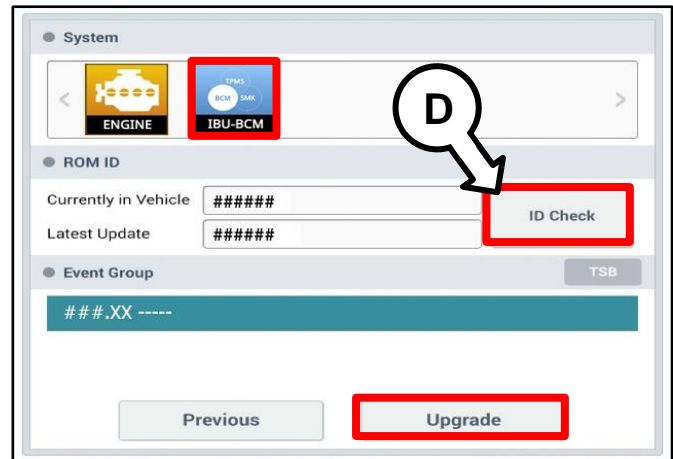
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8. Select the **IBU-BCM** system under the System selection menu.

   Touch **ID Check** (D) and confirm that the latest update is available.

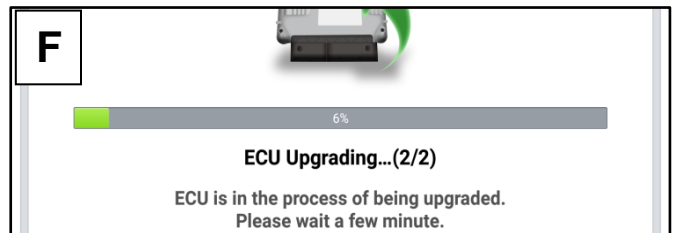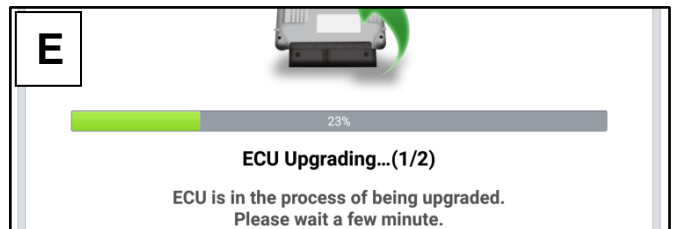   Select **Upgrade Event #428** and select **Upgrade** to continue.

9. The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.

   ⚠️ **CAUTION**

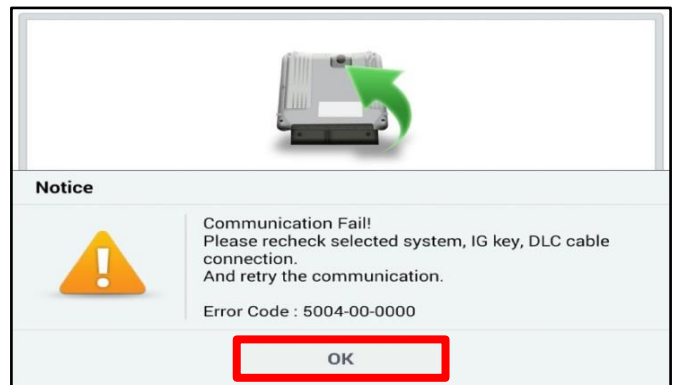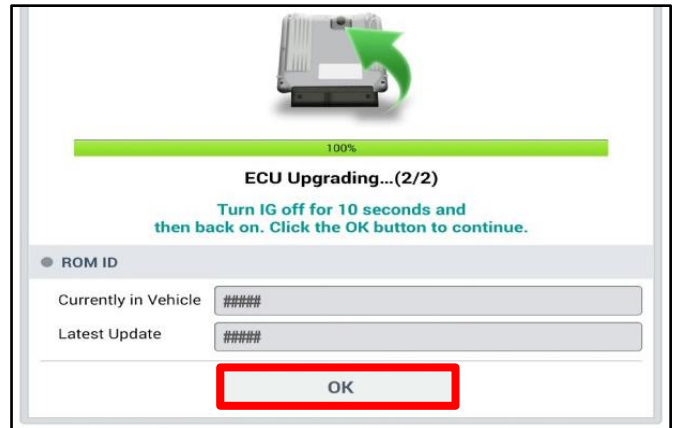   **Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.**

10. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.
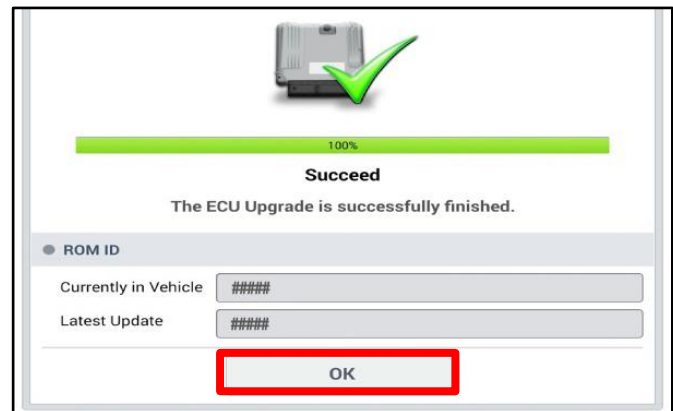
    ∗ **NOTICE**

    If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.

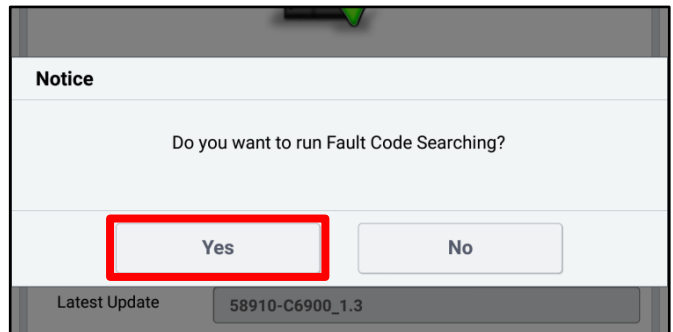**SUBJECT:** SERVICE ACTION: IBU SMART TRUNK LOGIC IMPROVEMENT (SA390)

11. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.

12. Once the upgrade is complete, touch **OK** to finalize the procedure.

13. 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.

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

Manual Upgrade Procedure:

> **★ NOTICE**
>
> **The manual upgrade should ONLY be performed if the automatic upgrade fails.**
>
> **If the automatic upgrade fails, disconnect the negative (-) battery terminal for twenty (20) seconds <u>with the driver door open</u> and reconnect BEFORE performing the IBU upgrade.**
>
> **<u>If the Auto Mode upgrade has failed</u>, "Ignition-On" and "Engine Start" may be unavailable, therefore, <u>conduct the Manual mode in the ignition-off condition</u>.**
>
> **See table below for Manual Mode passwords.**

Manual Mode ECU Upgrade Passwords

Menu	Password
BDm IBU : 95400-M7190/7200/7240/7250/7320/7330	9330

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

2. Select the **IBU-BCM** system under the System selection menu. Select **Upgrade Event #428** and select **Upgrade** to continue.

3. Select the appropriate control unit part number with reference to the ROM ID Information Table on page 2, 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. Touch **OK** to continue.

7. Once the upgrade is complete, touch **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.

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AFFECTED VEHICLE RANGE:

Model	Production Date Range
Forte (BDm)	July 16, 2018 through June 3, 2019

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	95400 M7330	0	(SA390) BDm IBU Smart Trunk Operation Logic Improvement	190M08R0	0.4 M/H	N/A	0

> ★ **NOTICE**
>
> **VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA390</u> when accessing the WebDCS system.**