	GROUP	MODEL
	CHA	**2021MY Seltos (SP2) Soul (SK3)**
	NUMBER	DATE
	110	**April 2021**

TECHNICAL SERVICE BULLETIN

SUBJECT: **SERVICE ACTION: EPS LOGIC IMPROVEMENT FOR DTC C160404 (SA466)**

This bulletin provides the procedure to improve the software logic of the Electronic Power Steering (EPS) system on some 2021MY Seltos (SP2) and Soul (SK3) vehicles produced in the date ranges shown below, which may exhibit an MIL on with DTC C160404 during the system start up diagnostic check. To correct this concern, apply the improved logic to the EPS system 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 3 of this bulletin.

DCT Description:
C160404 - ECU Hardware Error

Model	Production Date Range
Seltos (SP2)	January 20, 2021 to February 10, 2021
Soul (SK3)	January 28, 2021 to February 8, 2021

Kia Diagnostic System (KDS)

✶ 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 SA466.

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

Circulate To: ☒ **General Manager** ☒ **Service Manager** ☒ **Parts Manager** ☒ **Service Advisors** ☒ **Technicians** ☒ **Body Shop Manager** ☐ **Fleet Repair**

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ECU Upgrade Procedure:

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

Upgrade Event Name
536. SK3 EPS MIL ON DTC (C160404) JUDGMENT LOGIC IMPROVEMENT
538. SP2 EPS MIL ON DTC (C160404) JUDGMENT LOGIC IMPROVEMENT

✶ NOTICE

- **Confirm a fully charged battery with 12.3 volts or higher is necessary or the use of 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 done with the ignition key in the 'ON' position unless otherwise stated.**
- **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.**

ⓘ 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.

✶ 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.

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ROM ID INFORMATION TABLE:

Upgrade Event #536

Model	System	ECU P/No.	ROM ID	
			Previous	New
SK3	EPS	56300 K0000 56300 K0200 56300 K0300	ASY-HK045616-S2-V00DA07_0221	ASY_HK045616-S2-V00EA03_0240

Upgrade Event #538

Model	System	ECU P/No.	ROM ID	
			Previous	New
SP2	EPS	56300 Q5200 56300 Q5600 56300 Q5800	ASY-HK045616-S2-V02EB02_0227	ASY-HK045616-S2-V02EB03_0242

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.

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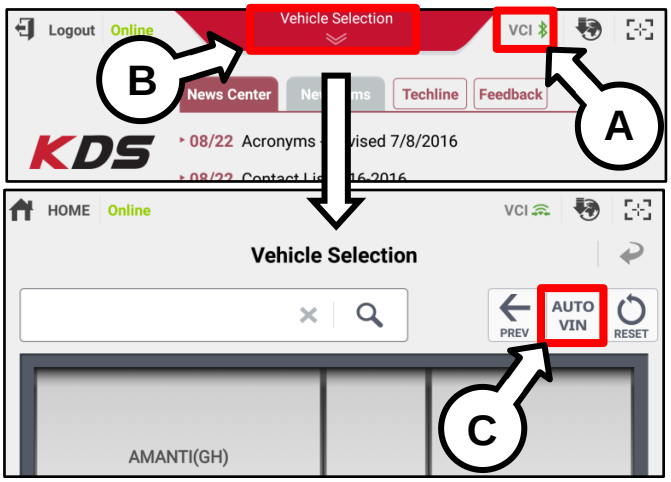
1. Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.

★ NOTICE

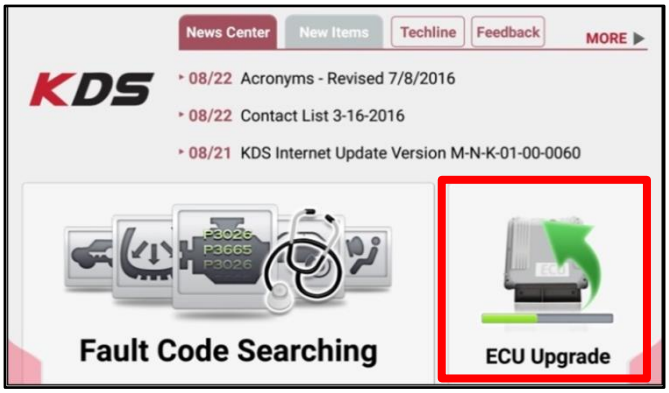
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.

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

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



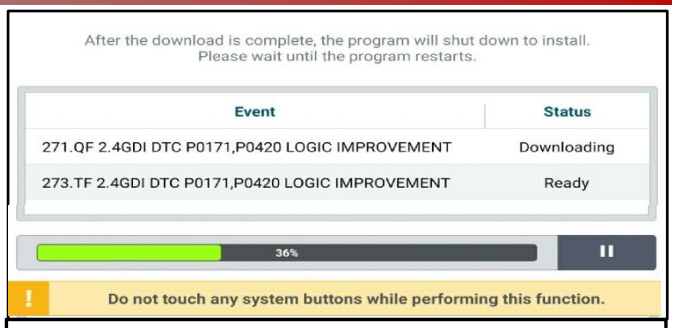
4. Select **ECU Upgrade**.



5. The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #536 (SK3) OR #538 (SP2).**

★ NOTICE

The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.

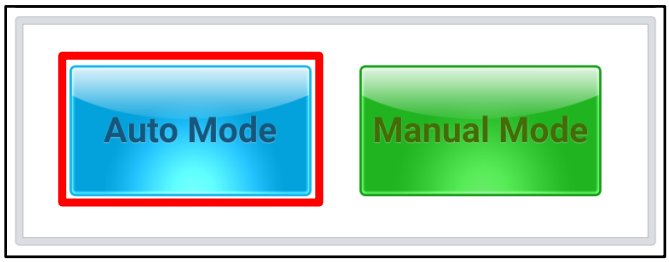


KDS screenshot shown above is for demonstration purposes only. Events shown in screenshot are not applicable to this bulletin.

6. Select **Auto Mode**.

⚠ CAUTION

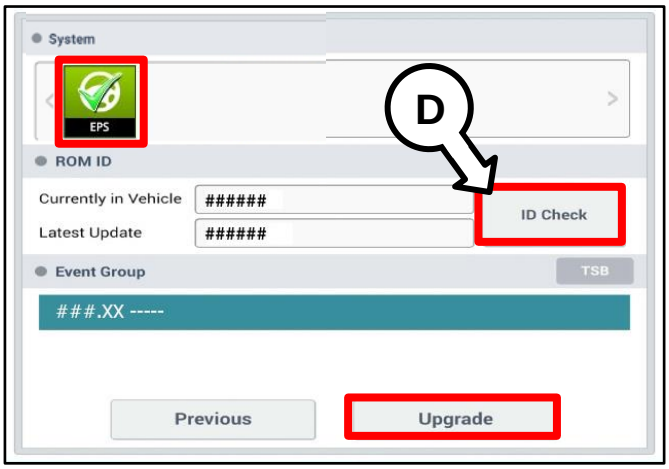
Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.



7. Select the **EPS** system under the System selection menu.

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

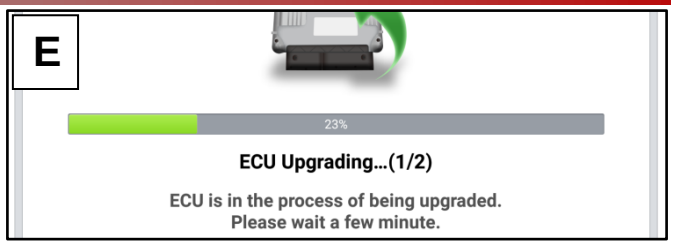
Select **Upgrade Event #536 (SK3) OR #538 (SP2).** and select **Upgrade** to continue.

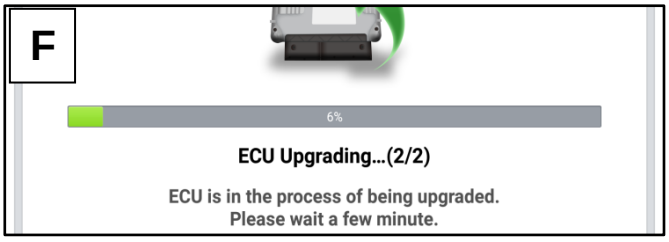


8. The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.

⚠ CAUTION

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

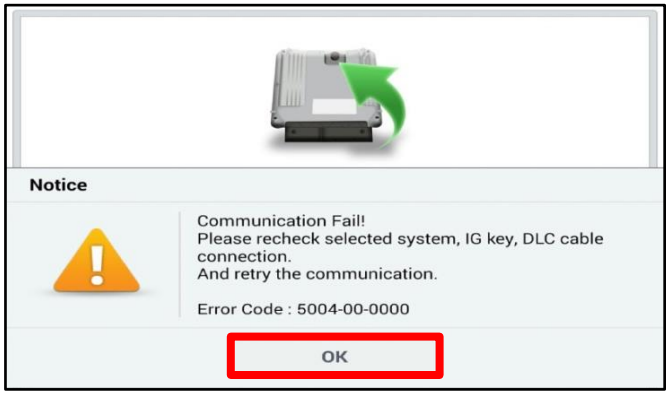




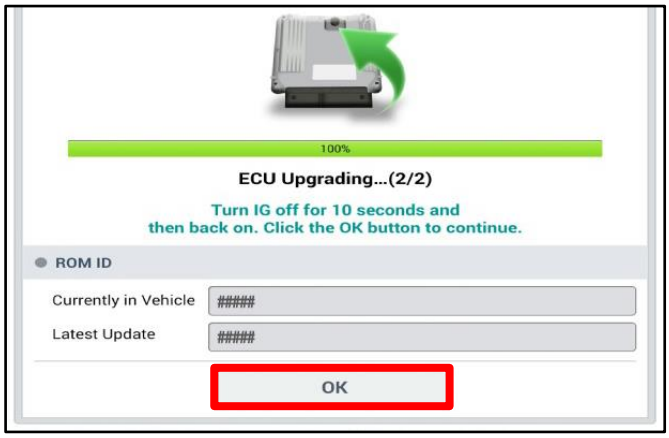
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

✶ NOTICE

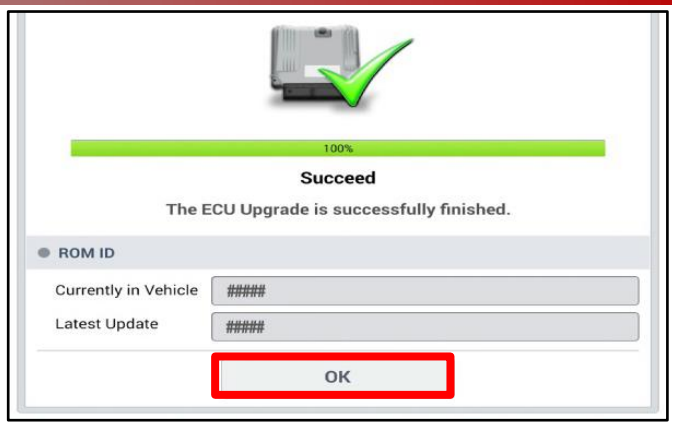
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



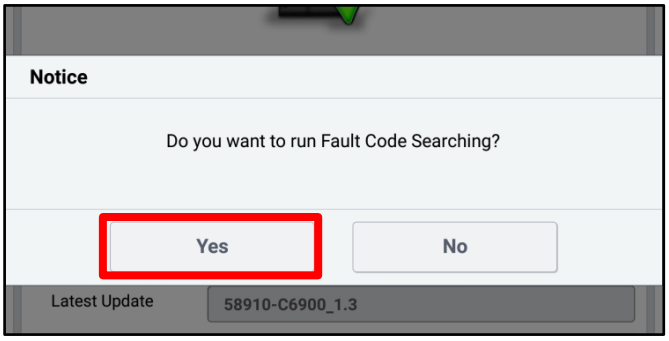
10. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.



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



12. 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.



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

See table below for Manual Mode passwords.

Manual Mode ECU Upgrade Passwords

Menu	Password
SK3 EPS : 56300-K0000/200/300	0056
SP2 EPS : 56300-Q5200/600/800	5280

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **EPS** system under the System selection menu. Select **Upgrade Event #536 (SK3) OR #538 (SP2)** 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. 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
Seltos (SP2)	January 20, 2021 to February 10, 2021
Soul (SK3)	January 28, 2021 to February 8, 2021

WARRANTY INFORMATION:

N Code: N99 C Code: C99

Claim Type	Model	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
V	SP2	56310 Q5200	0	(SA466) EPS Logic Improvement	210025R0	0.3 M/H	N/A	0
	SK3	56310 K0000						

★ NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA466 when accessing the WebDCS system.