



GROUP
ENG

MODEL
**2019-2020MY
Sorento (UMa)**

NUMBER
220

DATE
July 2020

TECHNICAL SERVICE BULLETIN

SUBJECT:

**LAMBDA 3.3L GDI ENGINE HESITATION
AT HIGH ALTITUDES LOGIC IMPROVEMENT**

This bulletin provides the procedure to improve the logic of the Engine Control Module (ECM) on some 2019-2020MY Sorento (UMa) vehicles equipped with a LAMBDA 3.3L GDI engine, produced from January 22, 2018 through July 22, 2020, which may experience engine hesitation when driving at high altitudes, over 6,000 ft. elevation (2000m). To correct this concern, apply the improved logic to the ECU 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.

*** NOTICE**

This issue has been isolated to a few Sorento (UMa) vehicles from the state of Colorado. Warranty claims will be monitored to verify customer concern of engine hesitation at high elevation from this region. Claims that do not fit these conditions will be subject to chargeback.



Kia Diagnostic System (KDS)

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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**LAMBDA 3.3L GDI ENGINE HESITATION
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To correct this condition, the ECU should be reprogrammed using the KDS download, as described in this bulletin.

Upgrade Event Name**503. UMA LAMBDA 3.3GDI ENGINE HESITATION PREVENTION LOGIC AT HIGH ALTITUDES***** NOTICE**

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that a battery charger is used in ECU mode during reflashing or the use of a fully charged jump starter box connected to the battery.
- 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**

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.

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★ 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 #503

Model	EM	TM	IMMO 	ECU P/No.	ROM ID	
					Previous	New
(UMa) 19MY	Lambda 3.3GDI	AT	Yes	39101 3LMN0	UMKN3GM F0A UMKN3GM F0C UMKN3GM F0D	UMKN3GM F0E
			No	39101 3LMN2	UMKN3GS F0A UMKN3GS F0C UMKN3GS F0D	UMKN3GS F0E
Yes			39101 3LMN3	UMLN3GM J0A	UMLN3GM J0C	
No			39101 3LMN4	UMLN3GS J0A	UMLN3GS J0C	
(UMa) 20MY						

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.

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

* NOTICE

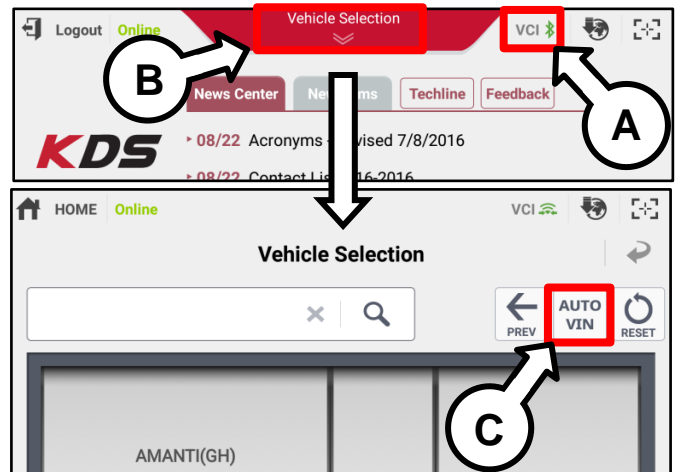
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



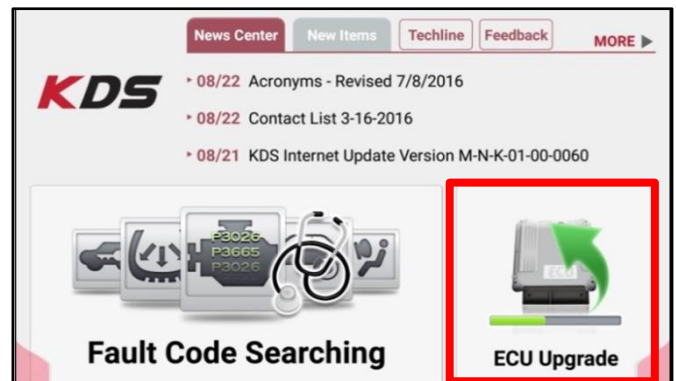
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.



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



4. Select **ECU Upgrade**.



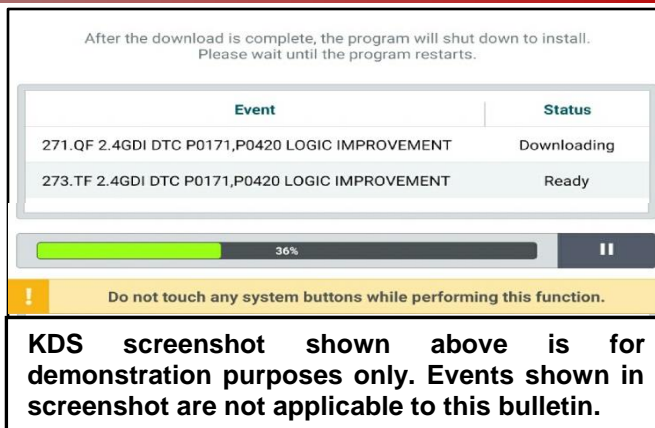
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- The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #503 (UMa)**.

* NOTICE

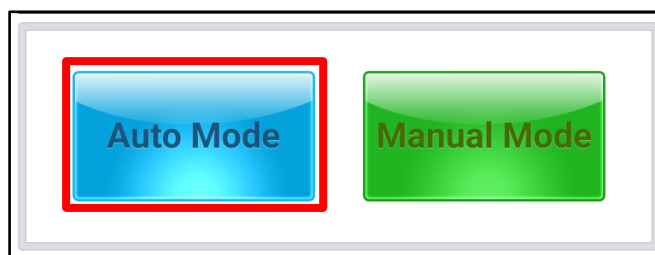
The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.



- Select **Auto Mode**.

CAUTION

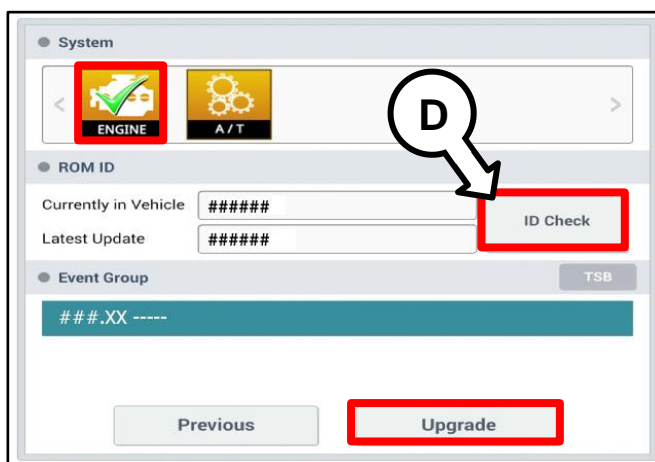
Do NOT attempt to perform a Manual Mode upgrade **UNLESS Auto Mode fails**. Always follow the instructions given on the KDS in either Auto or Manual mode.



- Select the **ECU** system under the System selection menu.

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

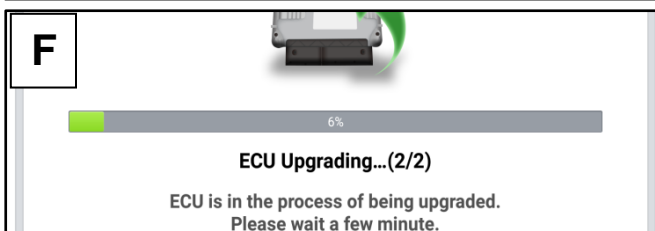
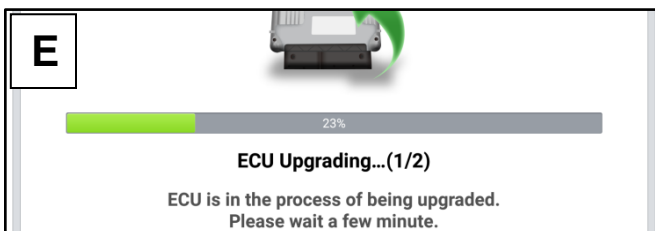
Select **Upgrade Event #503** and select **Upgrade** to continue.



- 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

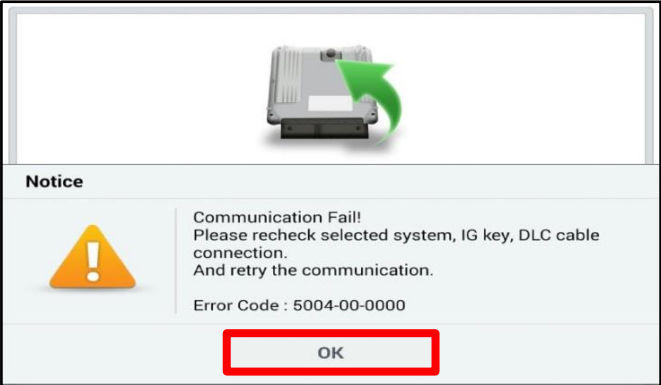
Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.



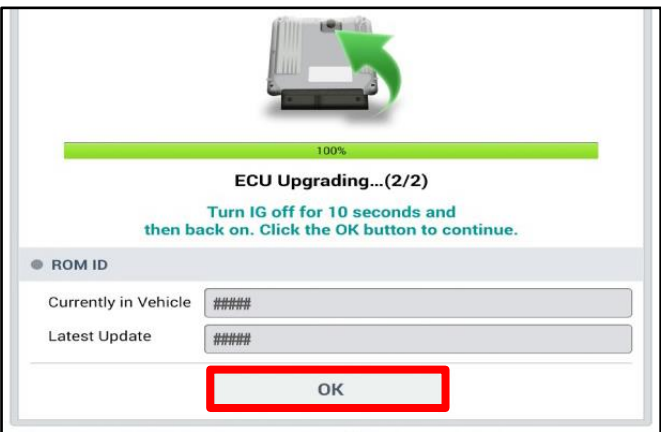
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- If a “Communication Fail” screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

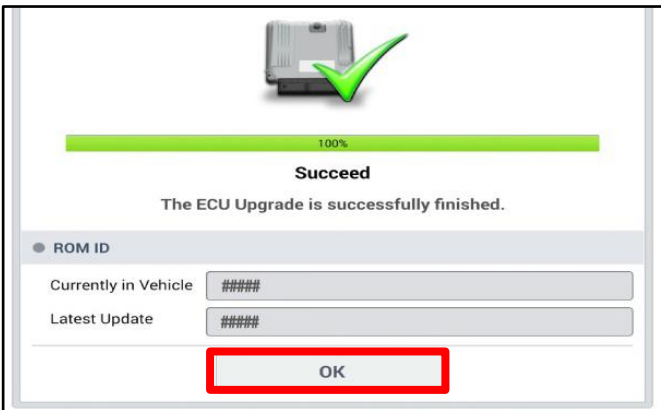
*** NOTICE**
 If an error notice continues to appear or if the upgrade cannot be performed, **DO NOT** disconnect the KDS/VCI-II. Contact **GIT America Help Desk** at (888) 542-4371 or Techline.



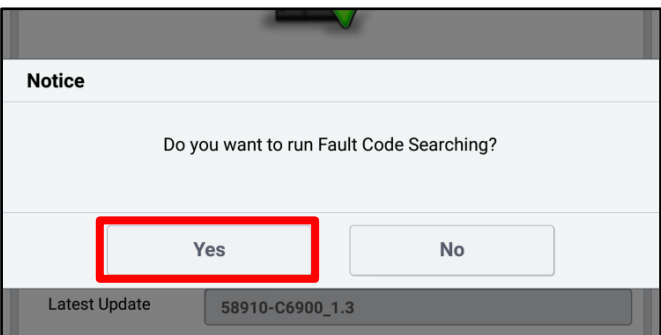
- When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.



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



- 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.



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



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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
UMA 3.3GDI AT -IMMO (19MY) : 39101-3LMN2	0132
UMA 3.3GDI AT +IMMO/SMK (19MY) : 39101-3LMN0	0130
UMA 3.3GDI AT -IMMO (20MY) : 39101-3LMN4	0134
UMA 3.3GDI AT +IMMO/SMK (20MY) : 39101-3LMN3	0133

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **ECU** system under the System selection menu. Select **Upgrade Event #503** 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
Sorento (UMa)	January 22, 2018 to July 22, 2020

WARRANTY INFORMATION:

N Code: D34 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	39101 3LMN0	0	LAMBDA 3.3GDI Engine Hesitation Prevention at High Altitudes Logic Improvement	39110FN3	0.3 M/H	N/A	0

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