

GROUP	MODEL
TRA	2019MY
	Sorento (UMa)
	w/3.3L GDI, 8AT
NUMBER	DATE
095	April 2021

TECHNICAL SERVICE BULLETIN

SUBJECT:

3.3L GDI 8AT TCU GEAR SHIFT LOGIC IMPROVEMENT

This bulletin provides the procedure to improve the gear shift logic of the Transmission Control Unit (TCU) on some 2019MY Sorento (UMa) vehicles produced from January 24, 2018 through September 24, 2018, equipped with Lambda 3.3L GDI engine and 8-speed automatic transmission, which may exhibit symptoms of acceleration delay and hesitation after vehicle speed is reduced and close to 0 mph. To correct this concern, apply the improved logic to the Transmission 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.



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

ECU Upgrade Procedure:

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

Upgrade Event Name

531. UMA LAMBDA 3.3GDI 8AT TCU GEAR SHIFT LOGIC IMPROVEMENT

* NOTICE

- Confirm a <u>fully charged battery</u> 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.

(i) 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.



ROM ID INFORMATION TABLE:

Upgrade Event #531

Model	ENC	EN4	TM	TYPE	ECU P/No.	ROM ID		
Model	ENG	EM				Previous	New	
UMa	3.3L GDI	ULEV	8AT	2WD 4WD	95441-4G460 (95440-4G460)	TUM2G33NL0 TUM2G33NL1 TUM2G33NL2 TUM2G33NL3 TUM2G33NL4 TUM2G33NL5 TUM2G33NL6	TUM2G33NL7	

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.

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

* NOTICE

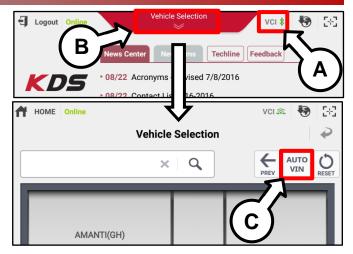
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.

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.



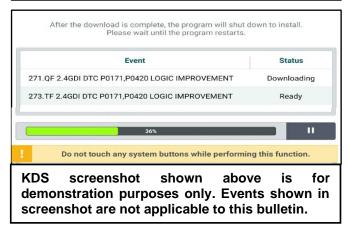
4. Select ECU Upgrade.



 The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #531.**

* NOTICE

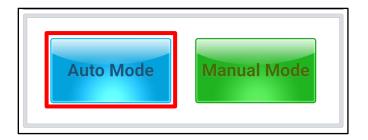
The vehicle must be identified in Vehicle Selection to download an Event for that vehicle.



6. Select **Auto Mode**.



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





7. Select the **A/T** system under the System selection menu.

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

Select **Upgrade Event #531** 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.

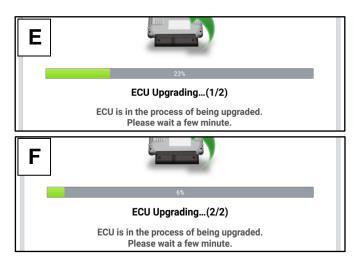


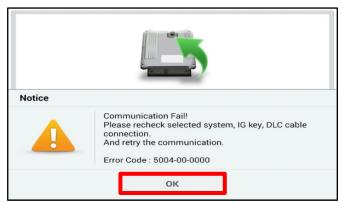
Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.

 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.

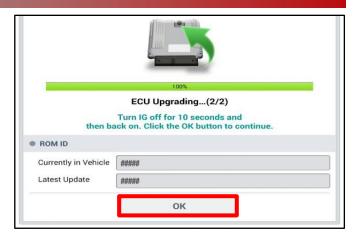




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10. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.



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		
UMa Lambda 3.3GDI 8AT 2WD : 95440/441-4G460	0644		
UMa Lambda 3.3GDI 8AT 4WD : 95440/441-4G480	0844		

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- 2. Select the A/T system under the System selection menu. Select **Upgrade Event #531** 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 24, 2018 to September 24, 2018			

WARRANTY INFORMATION:

N Code: T43 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	95440 4G460	0	TCU Logic Improvement	95441F13	0.3 M/H	N/A	0

