

GROUP TRA	MODEL 2019MY		
NUMBER	Sorento (UMa) DATE		
082	May 2019		

TECHNICAL SERVICE BULLETIN

SERVICE ACTION: 3.3 GDI 8AT TCU

LOGIC IMPROVEMENT FOR DTC P0741 (SA387)

This bulletin provides the procedure to improve logic of the TCU (Transmission Control Unit) software on some 2019MY Sorento (UMa) 3.3L vehicles produced from January 24, 2018 to March 26, 2019, which may experience a malfunction indicator lamp (MIL) ON with DTC P0741. To correct this concern, apply the improved logic to the TCU 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.

DTC: P0741 - Torque Converter Clutch Circuit Performance or Stuck Off



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 \rightarrow Warranty Coverage \rightarrow Warranty Coverage Inquiry \rightarrow Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs \rightarrow Not Completed Recall \rightarrow Recall VIN \rightarrow Select Report), which includes a list of affected vehicles.

This issue number is **SA387**.

File Under: <Transmission>

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

420. UMA LAMBDA 3.3GDI 8AT TCU MIL ON DTC (P0741) LOGIC IMPROVEMENT

* NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR 8-1299 system be used in ECU mode during charging. DO NOT connect any other battery charger to the vehicle during ECU upgrade.
- 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, 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 #420

Model	EM	TAA	TYPE	ECU P/No.	ROM ID	
wodei	⊏IVI	TM	ITPE	ECU P/NO.	Previous	New
	Ma Lambda 3.3GDI	8AT	FWD	95441 4G460	TUM2G33NL0 TUM2G33NL1 TUM2G33NL2 TUM2G33NL3	TUM2G33NL4
ОМа			AWD	95441 4G480	TUM4G33NL0 TUM4G33NL1 TUM4G33NL2 TUM4G33NL3	TUM4G33NL4

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

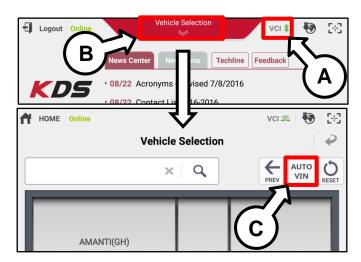
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



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.



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4. Select ECU Upgrade.

 The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #420 (UMa).

* NOTICE

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

6. Select Auto Mode.

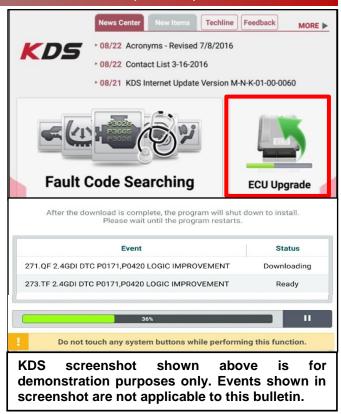


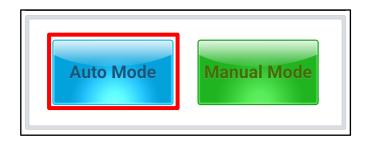
Do NOT attempt to perform a Manual Mode upgrade <u>UNLESS</u> <u>Auto Mode fails</u>. Always follow the instructions given on the KDS in either Auto or Manual mode.

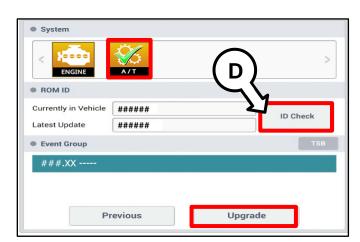
Select the AT system under the System selection menu.

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

Select **Upgrade Event #420** and select **Upgrade** to continue.







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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.



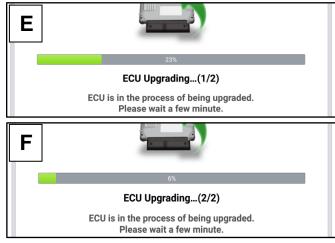
Do not touch the system buttons (like 'Back', 'Home', 'etc.') while performing ECU Upgrade.

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.

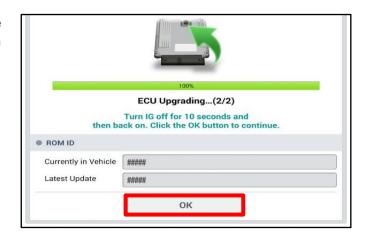
* NOTICE

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.







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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.

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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 LAMBDA 3.3GDI 8AT (FWD) : 95441-4G460	4160
UMA LAMBDA 3.3GDI 8AT (AWD) : 95441-4G480	4180

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- 2. Select the ECU system under the System selection menu. Select **Upgrade Event #420** or 421 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
Sorento (UMa)	January 24, 2018 to March 26, 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	95440 4G480	0	(SA387) LAMBDA 3.3GDI 8AT TCU ON (P0741) Logic Improvement (UMa)	190A21R0	0.3 M/H	N/A	0

* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference <u>SA387</u> when accessing the WebDCS system.