



GROUP	MODEL
Voluntary Emissions Service Campaign	2016-2018MY Sorento (UMa) w/Theta 2.0L T-GDI ULEV
NUMBER	DATE
SC260	April 2023

VOLUNTARY EMISSIONS SERVICE CAMPAIGN

SUBJECT: THETA 2.0L T-GDI ECU LOGIC IMPROVEMENT (SC260)

This bulletin provides the procedure to update the emissions-related software logic of the Electronic Control Module (ECM) with an improved version on certain 2016-2018MY Sorento vehicles equipped with Theta 2.0L T-GDI ULEV engines, produced from October 29, 2014 through November 29, 2017. To ensure compliance with emissions regulations, apply the improved logic to the 'Emissions' 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 pages 3 and 4 of this bulletin. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



Kia Diagnostic System (KDS)

NOTICE

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service → Warranty Coverage → Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

ECU Upgrade Procedure:

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

Upgrade Event Name
647.UMa THETA 2.0TGD I ULEV EMISSION LOGIC IMPROVEMENT

NOTICE

- Confirm a fully charged battery (12.3 volts or higher is necessary) is used or utilize 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 performed with the ignition set to the 'ON' position unless otherwise stated.
- **Damaged VCI II units should not be used and promptly replaced.**
- 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.

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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 #647

MY	Model	System	IMMO 	2WD/ 4WD	ECU P/No.	ROM ID	
						Previous	New
16MY	(UMa)	Engine	Yes	2WD	39100 2GTC6	UMAGNCOERA3A UMAGNCOERA5A UMAGNCOERA61 UMAGNCOERA6K UMAGNCOERA6M	UMAGNCOERA6O
			Yes	4WD	39100 2GTD6	UMAGNCOERA3A UMAGNCOERA5A UMAGNCOERA61 UMAGNCOERA6L UMAGNCOERA6N	UMAGNCOERA6P
			No	2WD	39100 2GTC1	UMAGNCOEMA3A UMAINCOERA7A UMAINCOERA7B UMAINCOERA7C UMAINCOERA8L UMAINCOERA8N UMAINCOERA8R	UMAGNCOEMA6O
			No	2WD	39100 2GTC3	UMAINCOEMA6A UMAINCOEMA7A UMAINCOEMA7B UMAINCOEMA7C UMAINCOEMA8K UMAINCOEMA8M UMAINCOEMA8Q	UMAINCOEMA8S
			No	4WD	39100 2GTD3	UMAINCOEMA6A UMAINCOEMA7A UMAINCOEMA7B UMAINCOEMA7C UMAINCOEMA8L UMAINCOEMA8N UMAINCOEMA8R UMAGNCOEMA5A UMAGNCOEMA61 UMAGNCOEMA6K UMAGNCOEMA6M	UMAINCOEMA8T



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

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Upgrade Event #647 (Continued)

MY	Model	System	IMMO 	2WD/ 4WD	ECU P/No.	ROM ID	
						Previous	New
16MY	UMa	Engine	No	4WD	39100 2GTD1	UMAGNCOEMA3A UMAGNCOEMA5A UMAGNCOEMA61 UMAGNCOEMA6L UMAGNCOEMA6N	UMAGNCOEMA6P
17MY		Engine	Yes	2WD	39100 2GTC7	UMAHNCOERA5A UMAHNCOERA6A UMAHNCOERA6B UMAHNCOERA6K UMAHNCOERA6M UMAHNCOERA6Q	UMAHNCOERA6S
			Yes	4WD	39100 2GTD7	UMAHNCOERA5A UMAHNCOERA6A UMAHNCOERA6B UMAHNCOERA6L UMAHNCOERA6N UMAHNCOERA6R	UMAHNCOERA6T
			No	2WD	39100 2GTC2	UMAHNCOEMA5A UMAHNCOEMA6A UMAHNCOEMA6B UMAHNCOEMA6K UMAHNCOEMA6M UMAHNCOEMA6Q	UMAHNCOEMA6S
			No	4WD	39100 2GTD2	UMAHNCOEMA5A UMAHNCOEMA6A UMAHNCOEMA6B UMAHNCOEMA6L UMAHNCOEMA6N UMAHNCOEMA6R	UMAHNCOEMA6T
18MY		Engine	Yes	2WD	39100 2GTC8	UMAINCOERA6A	39100 2GTC8
			No	4WD	39100 2GTD8	UMAINCOERA6A	UMAINCOERA8T

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

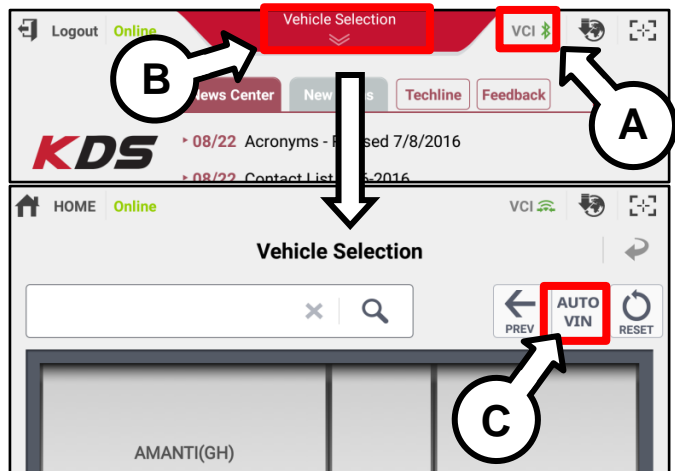
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



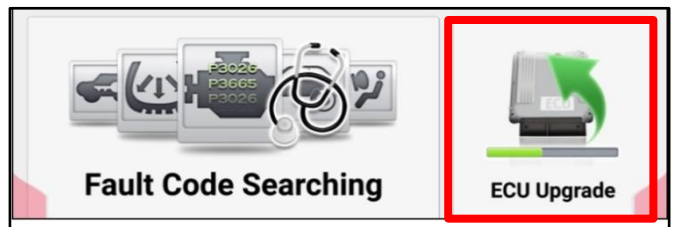
2. With the ignition ON, turn ON the KDS tablet. Select 'KDS' from the home screen.



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



4. Select 'ECU Upgrade'.



- The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #647. UMa THETA 2.0TGD I ULEV EMISSION LOGIC IMPROVEMENT

NOTICE

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

After the download is complete, the program will shut down to install. Please wait until the program restarts.

Event	Status
271.QF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Downloading
273.TF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Ready

36%

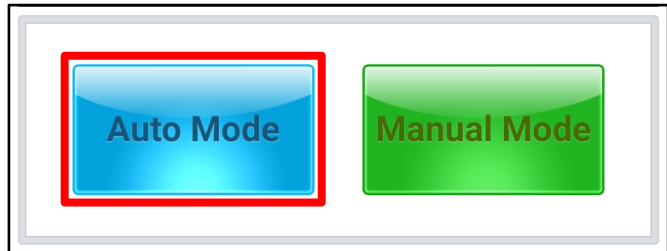
Do not touch any system buttons while performing this function.

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

- 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 'Engine' system under the System selection menu. Touch ID Check (D) and confirm that the latest update is available. Select Upgrade Event #647 and select Upgrade to continue.

System

ENGINE A/T

ROM ID

Currently in Vehicle ##### ID Check

Latest Update #####

Event Group TSB

###.XX ----

Previous Upgrade

- 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.

E

23%

ECU Upgrading...(1/2)

ECU is in the process of being upgraded. Please wait a few minute.

F

6%

ECU Upgrading...(2/2)

ECU is in the process of being upgraded. Please wait a few minute.

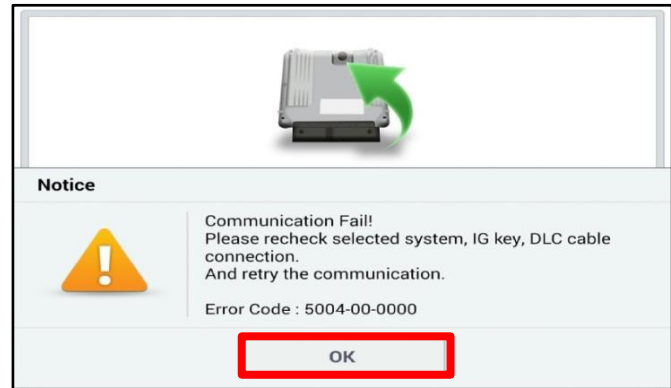
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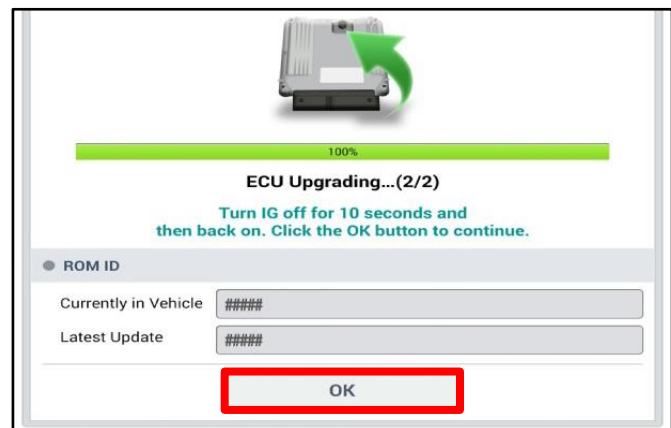
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Select 'OK' and restart the from step 4.

 **NOTICE**

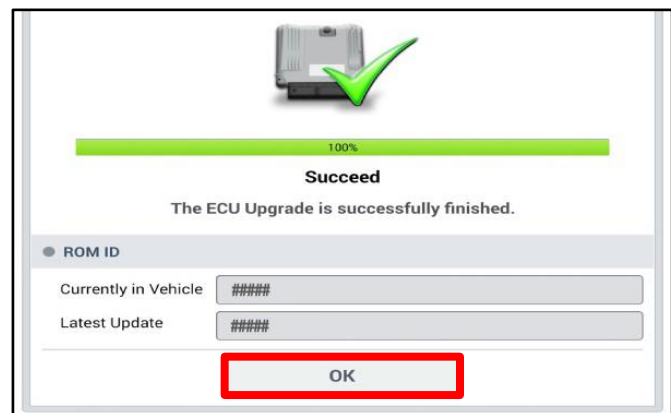
If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.



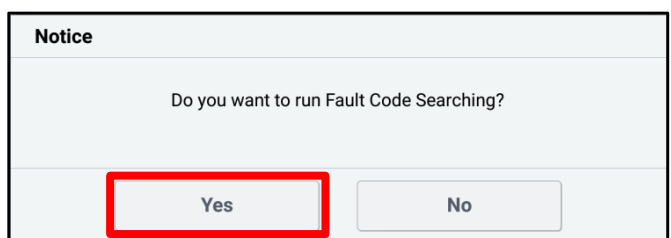
10. When instructed on the KDS, turn the ignition OFF for ten (10) seconds then back on. Select 'OK' to continue.



11. Once the upgrade is complete, select '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 normal 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 2.0TGDI +IMMO/SMK 16MY(2WD) : 39100-2GTC6	7601
UMA 2.0TGDI +IMMO/SMK 16MY(4WD) : 39100-2GTD6	7602
UMA 2.0TGDI -IMMO 16MY(2WD) : 39100-2GTC1	7603
UMA 2.0TGDI -IMMO 16MY(4WD) : 39100-2GTD1	7604
UMA 2.0TGDI +IMMO/SMK 17MY(2WD) : 39100-2GTC7	7605
UMA 2.0TGDI +IMMO/SMK 17MY(4WD) : 39100-2GTD7	7606
UMA 2.0TGDI -IMMO 17MY(2WD) : 39100-2GTC2	7607
UMA 2.0TGDI -IMMO 17MY(4WD) : 39100-2GTD2	7608
UMA 2.0TGDI +IMMO/SMK 18MY(2WD) : 39100-2GTC8	7609
UMA 2.0TGDI +IMMO/SMK 18MY(4WD) : 39100-2GTD8	7610
UMA 2.0TGDI -IMMO 18MY(2WD) : 39100-2GTC3	7611
UMA 2.0TGDI -IMMO 18MY(4WD) : 39100-2GTD3	7612

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the '**Engine**' system under the System selection menu. Select **Upgrade Event #647** 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. Select **OK**.
7. Once the upgrade is complete, select **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.

SUBJECT:

UMA THETA 2.0L T-GDI ECU LOGIC IMPROVEMENT (SC260)**ATTENTION: THE PROOF OF CORRECTION CARD AND CAMPAIGN COMPLETION LABEL ARE RESTRICTED ONLY TO DEALERS IN THE FOLLOWING STATES:**

California, Connecticut, Delaware, Massachusetts, Maine, Maryland, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. See Parts Information below to order the Proof of Correction Card and Campaign Completion Label from the PDC.

VEHICLE EMISSION RECALL - PROOF OF CORRECTION CARD

A Vehicle Emission Recall - Proof of Correction card must be filled out for all vehicles registered in California, Connecticut, Delaware, Massachusetts, Maine, Maryland, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington. Residents of these states, who own an affected vehicle, will be required to possess a Vehicle Emission Recall - Proof of Correction card as evidence of voluntary service campaign completion, when they apply for vehicle registration renewal.

WHAT TO DO WITH THE CARD:

The Vehicle Emission Recall - Proof of Correction card must be completed by the Dealership's Service Manager using a permanent ink pen. A fine point pen is recommended. When filling in the information, copy the information directly from the vehicle, not the repair order. **ALL INFORMATION MUST BE PRINTED AND NEAT.**

NOTE: DO NOT COMPLETE THE CARD UNLESS THE SERVICE CAMPAIGN WORK IS COMPLETED.

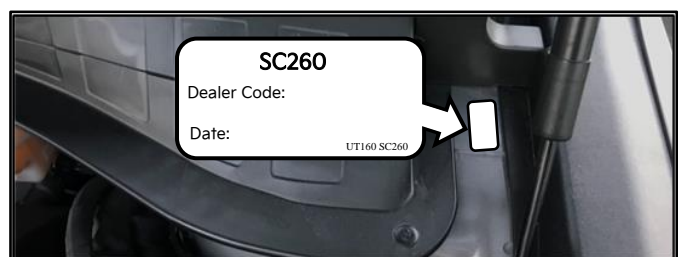
The copy of the card shown below indicates the areas to be filled in. Each area must be filled in. The completed card should be given to the owner of the vehicle upon completion of the Campaign and placement of the Campaign Completion Label outlined below.

Vehicle Emission Recall - Proof of Correction				
License Number	Make	Year Model	Body Type	Vehicle Identification Number
Manufacturer		Recall Number		
Kia America, Inc.		SC260		
The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.				
Dealer's Name		Address, City, State and Zip		
Dealership's Authorized Signature				
x				
Return this certificate to DMV <u>only</u> when required - otherwise retain for your records.				
UT161 SC260				

FILLING OUT AND APPLYING THE CAMPAIGN COMPLETION LABEL (CA and S.177 STATES ONLY):

The dealer must fill in the Dealer Code and Date information fields on the Campaign Completion Label. Once complete, affix the campaign completion label under the hood of the vehicle, as shown below.

CA and S.177 States Only: Apply SC260 Campaign Completion Label onto the body in the area next to the shock tower, as shown. **NOTE: Be sure to clean the mounting surface to ensure proper label adhesion.**



SUBJECT:

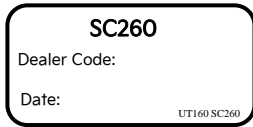

UMA THETA 2.0L T-GDI ECU LOGIC IMPROVEMENT (SC260)**AFFECTED VEHICLE RANGE:**

Model	Production Date Range
Sorento (UMa)	October 29, 2014 to November 29, 2017

REQUIRED TOOL:

Tool Name	Figure	Comments
KDS		Kia Diagnostic System

REQUIRED PART:

Part Name	Part Number	Figure	Qty.
Campaign Completion Label	UT160 SC260*		1
Vehicle Emissions Recall Proof of Correction Card	UT161 SC260*		1

*Completion Label and Proof of Correction Card only required for vehicles registered in CA, CT, DE, MA, MD, ME, NJ, NY, OR, PA, RI, VT, and WA "States" only.

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.
R	39100 2GTC6	0	UMa Theta 2.0L T-GDI ULEV Emission Logic Improvement	230A03R0	0.3 M/H	N/A	0

NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SC260** when accessing the WebDCS system.