



GROUP  
TRA

MODEL  
2017MY  
Sorento (UMa) w/  
2.4L GDI

NUMBER  
063

DATE  
October 2016

## TECHNICAL SERVICE BULLETIN

SUBJECT:

SERVICE ACTION: TCU UPGRADE – DRIVING  
PERFORMANCE IMPROVEMENT (SA250)

This bulletin provides information related to the Transmission Control Unit (TCU) software upgrade for some 2017MY Sorento (UMa) 2.4L GDI vehicles produced from April 7, 2016 to October 22, 2016 for a logic improvement. To apply the improved logic, the TCU should be reprogrammed using the GDS/KDS download, 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 tables in this TSB. Kia is requesting the completion of this Service Action on all affected vehicles in dealer stock, prior to delivery. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



Global Diagnostic System (GDS)



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 SA250.

File Under: <Transmission>

Circulate To:  General Manager  Service Manager  Parts Manager

Service Advisor(s)  Technician(s)  Body Shop Manager  Fleet Repair

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### TCU Upgrade Procedure:

To apply the improved logic, the TCU should be reprogrammed using the GDS/KDS download, as described in this bulletin.

UPGRADE EVENT NAME
300.UMA 2.4GDI TCU Gear Shift Logic Improvement

#### \* NOTICE

- A fully charged battery is necessary before ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 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 any cables connected to the vehicle or GDS 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.



#### CAUTION

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.

#### \* NOTICE

If performing this TSB using KDS, refer to TSB SST 037 for detailed information.

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### ROM ID INFORMATION TABLE:

#### Upgrade Events - Sorento (UMa)

MODEL	Event #	T/M	TCU P/N	ROM ID	
				PREVIOUS	NEW
UMa 2.4 GDI	#300	6AT	39100-2GGF2	TUM2G24NB2	TUM2G24NB3
			39100-2GGF7	TUM2G24NB2	TUM2G24NB3
			39100-2GGH2	TUM4G24NB2	TUM4G24NB3
			39100-2GGH7	TUM4G24NB2	TUM4G24NB3

*To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECU ROM ID and reference the Information Table, as necessary.*

1. Connect the power supply cable to the GDS.

#### \* NOTICE

If attempting to perform the ECU upgrade with the power supply cable disconnected from the GDS, be sure to check that the GDS is fully charged before ECU upgrade. If the GDS is not fully charged, failure to perform the ECU upgrade may occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS.

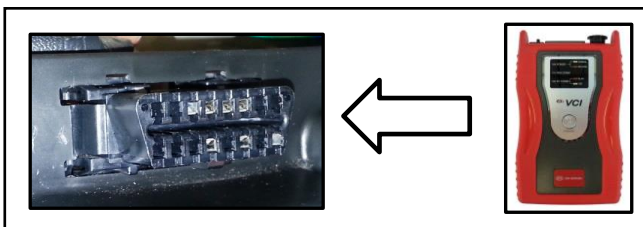
2. Connect the USB cable between the VCI and the GDS.

#### \* NOTICE

When performing the ECU upgrade using the GDS, wireless communication between the VCI and GDS is not available. Therefore, be sure to connect the USB cable between the VCI and the GDS.

3. Connect the Main 16-pin DLC cable (GHDM – 241000) to the VCI.

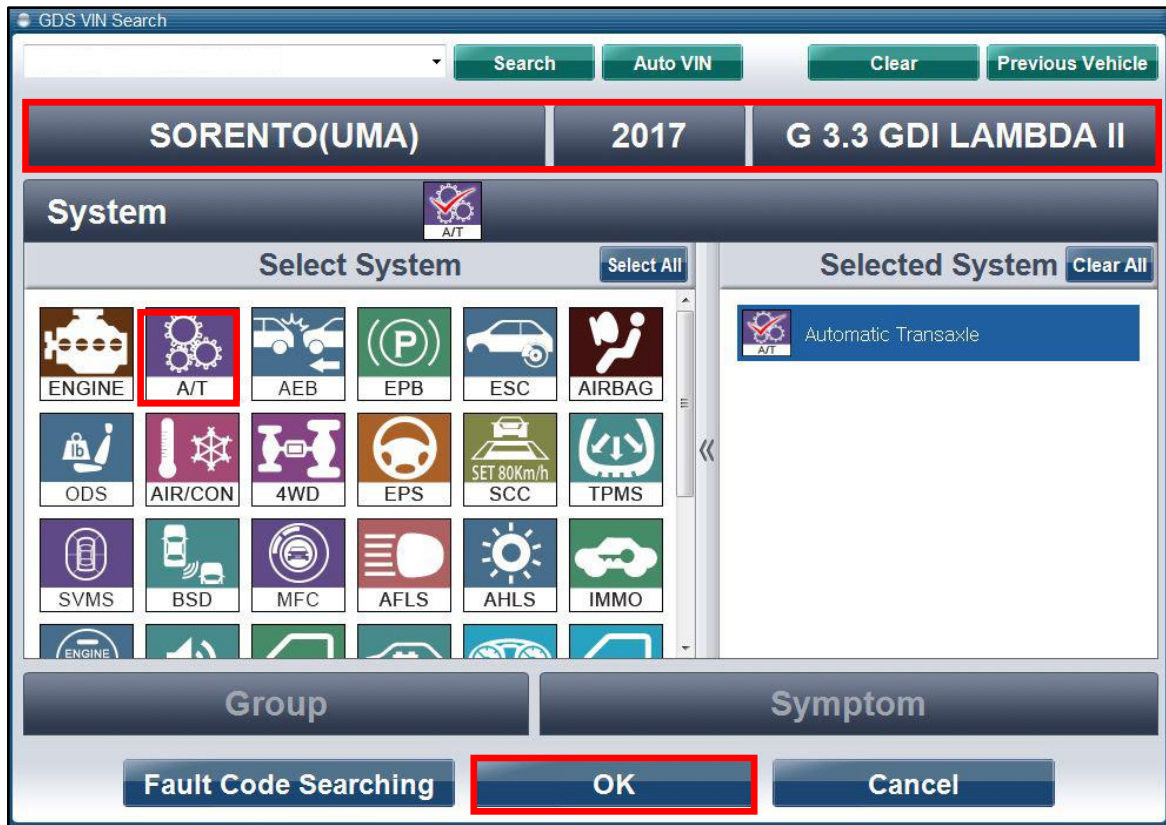
4. Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



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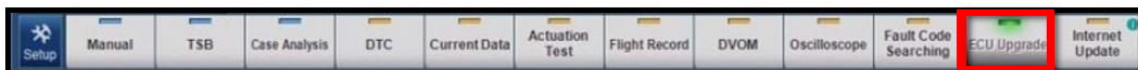
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5. With the ignition key ON, turn ON the VCI and GDS. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN AUTO DETECT** Function.
6. Select **A/T** system and click **OK**.



*Image shown is for reference only purposes and will vary by model.*

7. Select **ECU Upgrade** from the bottom right-hand corner. Next select **Auto Mode**, and then **A/T**. Perform the upgrade in accordance with normal GDS ECU upgrade procedures.



8. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored that may have been set during reprogramming.
9. Confirm proper operation of the vehicle.

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### CAUTION

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. 🚗

### \* NOTICE

Do NOT attempt to perform a Manual Mode upgrade unless Auto Mode fails. Always follow the instructions given on the GDS in either Auto or Manual mode. See table for Manual Mode passwords.

### Manual Mode Upgrade

#### MANUAL MODE UPGRADE PASSWORD:

#### Upgrade Event - Sorento (UMa)

EVENT	SYS	MENU	PASSWORD
#300	UMA 2.4GDI	UMA 2.4GDI TCU : 39100-2GGF2/F7	<b>0023</b>
		UMA 2.4GDI TCU : 39100-2GGH2/H7	<b>0028</b>

1. Within the ECU Upgrade screen, select **Manual Mode** in the left column, select **A/T** and then select **Upgrade Event #300**. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 3, and click **OK**.
2. Enter the password from the table above, and click **OK**.
3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
4. When the GDS reports that the TCU upgrade has been successfully completed, click **OK**, turn OFF the ignition key, and wait at least 10 seconds before attempting to start the engine.
5. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored that may have been set during reprogramming.
6. Confirm proper operation of the vehicle.

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AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date
Sorento (UMa) 2.4L GDI	April 7, 2016 to October 22, 2016

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Replacement Parts	Qty.
V	39100 2GGF2	0	N99	C99	(SA250) TCU Upgrade	160A36R0	0.3 M/H	N/A	0

### ★ NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA250 when accessing the WebDCS system.