

	GROUP	MODEL					
	TRA	2017MY					
		Sorento (UMa) w/					
		3.3L GDI					
	NUMBER	DATE					
	062 (Rev 1, 10/26/2016)	October 2016					
- 6							

TECHNICAL SERVICE BULLETIN

SUBJECT:

SERVICE ACTION: TCU UPGRADE – DRIVING PERFORMANCE IMPROVEMENT (SA246)

***** NOTICE

This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides information related to the Transmission Control Unit (TCU) software upgrade for some 2017MY Sorento (UMa) 3.3L GDI vehicles produced from April 6, 2016 to October 20, 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 <u>dealer stock</u>, 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 \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 <u>SA246</u>.

File Under: < Transmission>



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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

301.UMA 3.3GDI 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.

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 #	Т/М	TCU P/N	ROM ID		
WODEL	Event #			PREVIOUS	NEW	
				TUM0Z33N*****S7		
			39111-3CWN1	TUM0Z33N*****S6	Z33N*****\$S5 Z33N*****\$S4	
			39111-30000	TUM0Z33N*****S5		
UMa	#201	6AT		TUM0Z33N*****S4		
3.3 GDI	#301	0A1		TUM0Z33N*****S7		
			39101-3CWN1	TUM0Z33N*****S6		
			39101-300001	TUM0Z33N*****S5	TUM0Z33N*****S8	
				TUM0Z33N*****S4]	

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.
- 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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- 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**.

CDS VIN Search	- Searc	h Auto VIN	Clear Previous Vehicle
SORE	ENTO(UMA)	2017	G 3.3 GDI LAMBDA II
System			
	Select System	Select All	Selected System Clear All
ENGINE ATT	Image: AEB Image: PB	AIRBAG	Automatic Transaxle
(Group	_	Symptom
Fault C	Code Searching	ОК	Cancel

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.

Setup Manual TSB Case Analysis DTC Current Data Actuation Test Flight Record DVOM Oscilloscope Fault Code Searching	ECU Upgrade Update
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- 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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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	
#301	UMA 3.3GDI	UMa 3.3GDI TCU : 39101/111-3CWN1	1131	

- 1. Within the ECU Upgrade screen, select **Manual Mode** in the left column, select **A/T** and then select **Upgrade Event #301**. 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) 3.3L GDI	April 6, 2016 to October 20, 2016			

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Replacement Parts	Qty.
V	39111 3CWN1	0	N99	C99	(SA246) TCU Upgrade	160A35R0	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>SA246</u> when accessing the WebDCS system.