GROUP	MODEL						
ENG	2018MY Sorento (UMa) 2.4L						
NUMBER	DATE						
177C (Rev 3, 03/21/2018) November 2017							
TECHNICAL SERVICE BULLETIN							
SERVICE ACTION: 2.4L ENGINE START LOGIC							
SUBJECT: IMPROVEMENT (SA316C)							
	ENG NUMBER 177C (Rev 3, 03/21/2018) SERVICE BULLETIN .4L ENGINE START LO						

***** 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 the procedure to improve the logic of the Engine Control Unit (ECU) on some 2018MY Sorento (UMa) 2.4L vehicles, produced from September 20, 2017 through December 6, 2017, which may experience a very slight surging sensation with the cruise control activated. To correct this concern, apply the improved logic to the ECU 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. Kia is requesting the completion of this Service Action on all affected vehicles. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



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>SA316C</u>.

File Under: < Engine>

Circulate To:Image: Image: Image:

SERVICE ACTION: 2.4L SHIFT QUALITY & WAKE-UP LOGIC IMPROVEMENT (SA316C)

ECU Upgrade Procedure:

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

Upgrade Event Name 359.UMA 2.4L ECM ENGINE START 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 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 #359 (UMa ECU)

Model	ЕМ ТМ		IMMO	ECU P/No.	ROM ID		
Woder		ТМ		ECU F/NO.	Previous	New	
	2.4L ULEV	A.T.	Yes (+) 🖪	39100-2GGF8 39100-2GGH8	UMAINC4ERA6A UMAINC4ERA7A UMAINC4ERA7B UMAINC4ERD5A	UMAINC4ERD5B	
UMa	2.4L SULEV		No (-)	39100-2GGF3 39100-2GGH3	UMAINC4EMA6A UMAINC4EMA7A UMAINC4EMA7B UMAINC4EMD5A	UMAINC4EMD5B	

SERVICE ACTION: 2.4L SHIFT QUALITY & WAKE-UP LOGIC IMPROVEMENT (SA316C)

***** 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.



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

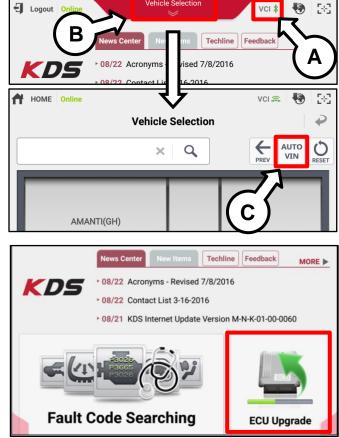
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.





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





TSB: SA316C (Rev 3) Sorento (UMa) November 2017

Page 4 of 7

SUBJECT:

SERVICE ACTION: 2.4L SHIFT QUALITY & WAKE-UP LOGIC IMPROVEMENT (SA316C)

 The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #359.

***** NOTICE

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

6. Select Auto Mode.



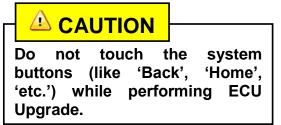
Do NOT attempt to perform a Manual Mode upgrade <u>UNLESS</u> <u>Auto Mode fails</u>. Always follow the instructions given on the KDS in either Auto or Manual mode.

7. Select the **Engine** system under the System selection menu.

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

Select **Upgrade Event #359** and select **Upgrade** to continue.

 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.

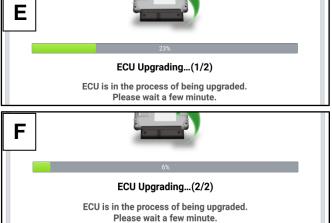


271.QF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT Downloading	Please wait until the program restarts.	
273.TF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT Ready	Event	Status
36%	271.QF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Downloading
	273.TF 2.4GDI DTC P0171,P0420 LOGIC IMPROVEMENT	Ready
	Do not touch any system buttons while performing	ng this function.
demonstration purposes only. Events shown	lemonstration purposes only. Ever	its snown

After the download is complete, the program will shut down to install.



• System	80 A/T	D	>
ROM ID		~	4
Currently in Vehicle	######	2	ID Check
Latest Update	#####		ID Check
Event Group			тѕв
###.XX			
Pi	revious	Upgra	de



Page 5 of 7

SERVICE ACTION: 2.4L SHIFT QUALITY & WAKE-UP LOGIC IMPROVEMENT (SA316C)

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

SUBJECT:

If an error notice continues to appear or if the upgrade cannot be performed, contact Techline or GIT America Help Desk.

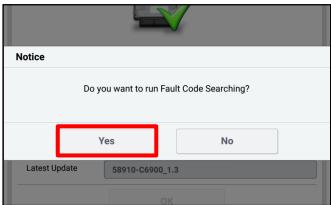
10. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.

11. Once the upgrade is complete, touch **OK** to finalize the procedure.



International Successfully finished.		
Turn IG off for 10 seconds and then back on. Click the OK button to continue. • ROM ID Currently in Vehicle Latest Update ##### OK OK OK Dos Succeed The ECU Upgrade is successfully finished. Currently in Vehicle ##### Latest Update #####	-	100%
Currently in Vehicle ##### Latest Update ##### OK OK 00% 10% Succeed The ECU Upgrade is successfully finished. • ROM ID Currently in Vehicle ##### Latest Update #####	then ba	Turn IG off for 10 seconds and
Latest Update ##### OK OK OK IO% Succeed The ECU Upgrade is successfully finished. • ROM ID Currently in Vehicle ##### Latest Update #####	ROM ID	
OK OK IOK Succeed The ECU Upgrade is successfully finished.	Currently in Vehicle	#####
10% Succeed The ECU Upgrade is successfully finished. • ROM ID Currently in Vehicle ##### Latest Update #####	Latest Update	#####
Succeed The ECU Upgrade is successfully finished.		
The ECU Upgrade is successfully finished. ROM ID Currently in Vehicle ##### Latest Update #####		
ROM ID Currently in Vehicle ##### Latest Update ######	The F	
Currently in Vehicle ##### Latest Update #####		or opyrate is successfully infinited.
Latest Update #####		
ок	Latest Update	*****
		ОК

 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.

SERVICE ACTION: 2.4L SHIFT QUALITY & WAKE-UP LOGIC IMPROVEMENT (SA316C)

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

Event	Model	Model System Menu					
359 UMA		UMa 2.4GDI ULEV –IMMO : 39100-2GGF3/H3	0233				
	UMA	ECU	UMa 2.4GDI ULEV +IMMO/SMK : 39100-2GGF8/H8 🖸	0827			

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
- Select the Engine system under the System selection menu. Select Upgrade Event #359 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.

SERVICE ACTION: 2.4L SHIFT QUALITY & WAKE-UP LOGIC IMPROVEMENT (SA316C)

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Sorento (UMa)	September 20, 2017 through December 6, 2017

WARRANTY INFORMATION:

N Code	: N99 C	Code:	C99

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
UMa 2.4L	V	39108 2GGC2	0	(SA316C) 2.4L ECU Logic Improvement	170A57R0	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>SA316C</u> when accessing the WebDCS system.