	GROUP TRA	MODEL 2018MY Optima (JFa) 2.0T Sorento (UMa) 2.0T, 3.3L
	NUMBER 071A (Rev 1, 11/21/2017)	DATE November 2017

TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: 2.0T & 3.3L SHIFT QUALITY LOGIC IMPROVEMENT (SA315A)

* 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 Transmission Control Unit (TCU) on some 2018MY Optima (JFa) 2.0T, produced from April 19, 2017 through July 10, 2017, and some 2018MY Sorento (UMa) 2.0T and 3.3L vehicles, produced from March 23, 2017 through September 18, 2017, which may experience a shift quality concern, such as a hard downshift, upshift, and/or shift delay. 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. 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.



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 SA315A.

File Under: <Transmission>

Circulate To: General Manager Service Manager Parts Manager
 Service Advisors Technicians Body Shop Manager Fleet Repair

ECU Upgrade Procedure:

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

Upgrade Event Name
351.JFA 2.0/2.4 TCU GEAR SHIFT LOGIC IMPROVEMENT
353.UMA 2.0/2.4 TCU GEAR SHIFT IMPROVEMENT
354.UMA 3.3 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 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 #351**

Model	EM	TM	TCU P/No.	ROM ID	
				Previous	New
JFa	2.0T	AT	39108-2GTK2	TJF0T20NSB	TJF0T20NSD
			39108-2GTK7	TJF0T20NSC	

Upgrade Event #353, 354

Model	EM	TM	TCU P/No.	ROM ID	
				Previous	New
UMa	2.0T	AT	39100-2GTC3	TUM2T20NB4	TUM2T20NB6
			39100-2GTC8	TUM2T20NB5	
UMa	3.3L		39100-2GTD3	TUM4T20NB4	TUM4T20NB6
			39100-2GTD8	TUM4T20NB5	
UMa	3.3L	39111-3CWN2	TUM0Z33NS8	TUM0Z33N*****S9	
		39101-3CWN2			

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.

*** 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**

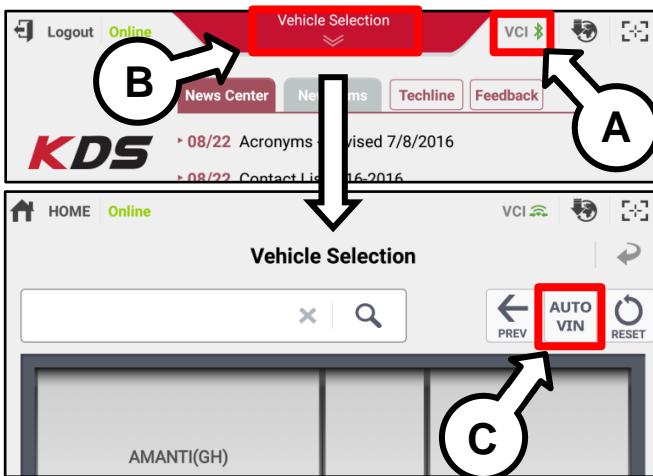
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.



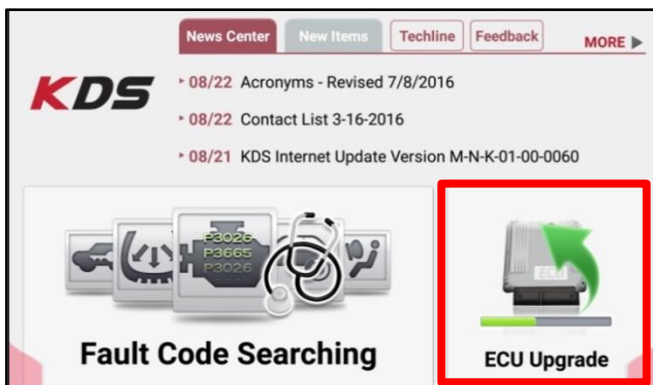
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.



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



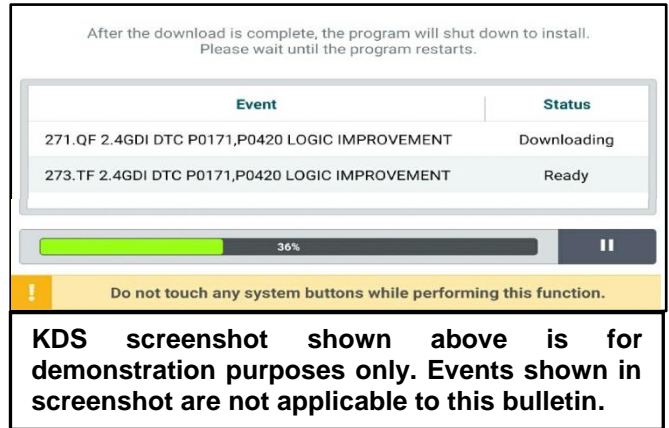
4. Select **ECU Upgrade**.



SUBJECT: SERVICE ACTION: SHIFT QUALITY LOGIC IMPROVEMENT (SA315A)

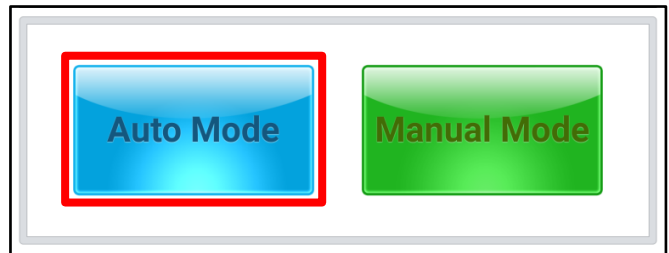
- The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #351, #353 or #354**.

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



- Select **Auto Mode**.

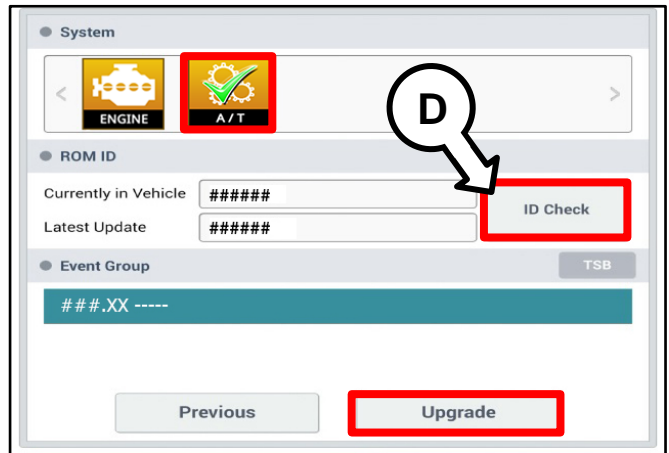
CAUTION
 Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.



- Select the **A/T** system under the System selection menu.

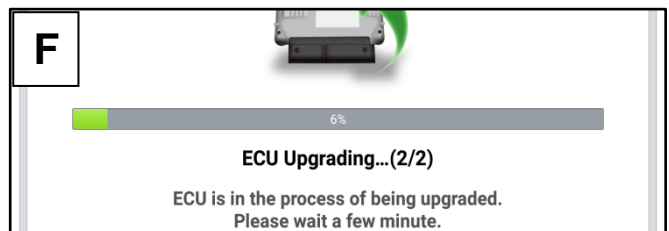
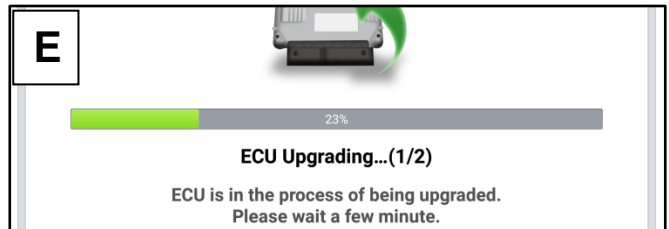
Touch **ID Check** (D) and confirm that the latest update is available.

Select **Upgrade Event #351, #353 or #354** 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.

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



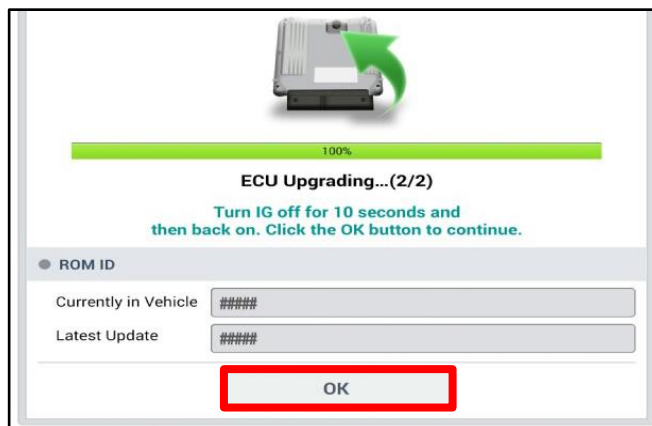
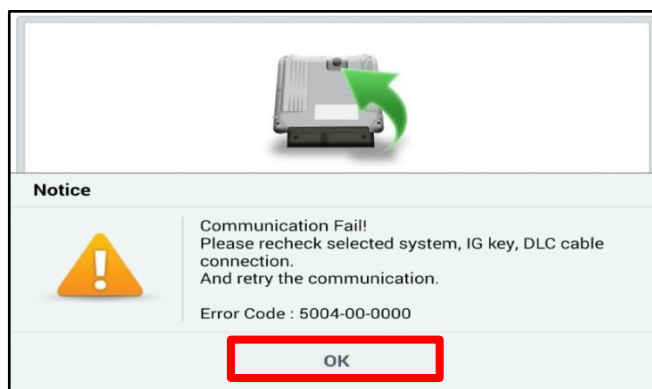
SUBJECT: SERVICE ACTION: SHIFT QUALITY LOGIC IMPROVEMENT (SA315A)

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.

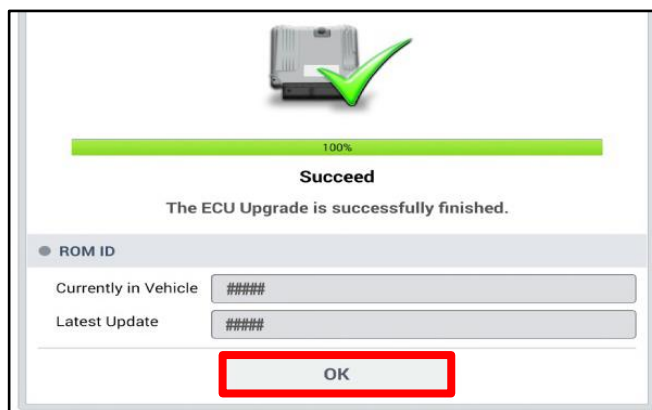
*** NOTICE**

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

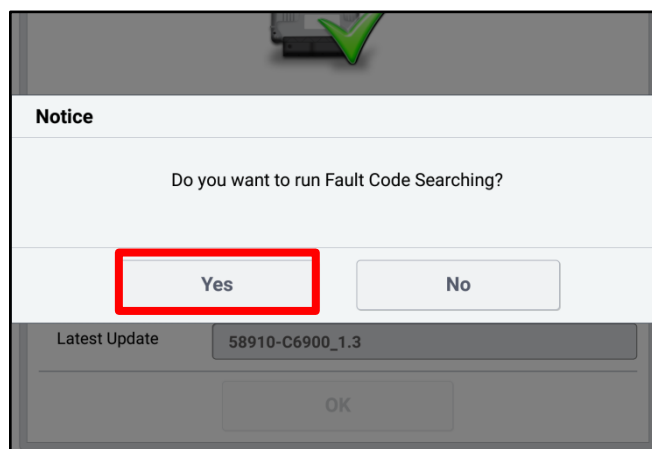
10. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.



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



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.

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	System	Menu	Password
351	JFa 2.0T	TCU	JFA 2.0TGDI ULEV : 39108-2GTK2/K7	8229
353	UMa 2.0T		UMA 2.0TGDI 2WD : 39100-2GTC3/C8	0240
			UMA 2.0TGDI 4WD : 39100-2GTD3/D8	0241
354	UMa 3.3L		UMA 3.3GDI : 39111/39101-3CWN2	0131

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **AT** system under the System selection menu. Select **Upgrade Event #351, #353 or #354** 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.

SUBJECT: SERVICE ACTION: SHIFT QUALITY LOGIC IMPROVEMENT (SA315A)

AFFECTED VEHICLE RANGE:

Model	Production Date Range
Optima (JFa) 2.0T	April 19, 2017 through July 10, 2017
Sorento (UMa) 2.0T, 3.3L	March 23, 2017 through September 18, 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.
JFa 2.0T	V	39100 2GTC8	0	(SA315A) 2.0T & 3.3L TCU Logic Improvement	170A54R0	0.3 M/H	N/A	0
UMa 2.0T, 3.3L								

*** NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA315A when accessing the WebDCS system.