	GROUP CHA	MODEL 2016-2017MY Optima (JFa) 2017MY Sorento (UMa) Forte (YDm) Sedona (YP)
	NUMBER 100	DATE October 2019

TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: AUTONOMOUS EMERGENCY BRAKE (AEB) LOGIC IMPROVEMENT (SA400)

This bulletin provides the procedure to improve the logic of the Autonomous Emergency Brake (AEB) control unit on some 2016-2017MY Optima (JFa), and 2017MY Sorento (UMa), Forte (YDm), and Sedona (YP) vehicles, which may experience unexpected AEB activation in certain circumstances. To address this potential issue, install the improved logic to the AEB control unit using the KDS ECU Upgrade function as described in this bulletin. For confirmation that the latest reflash has been installed in a vehicle you are working on, verify the ROM ID using the table on page 2 of this bulletin. Before conducting the procedure, verify 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 SA400.

File Under: <Chassis>

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

SUBJECT:

SERVICE ACTION: AUTONOMOUS EMERGENCY BRAKE LOGIC IMPROVEMENT (SA340)

ECU Upgrade Procedure:


The ECU should be reprogrammed using the KDS download, as described in this bulletin.

Upgrade Event Name
313. JFa AEB SYSTEM LOGIC IMPROVEMENT
314. UMa AEB SYSTEM LOGIC IMPROVEMENT
315. YDm AEB SYSTEM LOGIC IMPROVEMENT
316. YP AEB SYSTEM 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 #313, #314, #315, #316

Model	TM	AEB P/No.	ROM ID	
			Previous	New
JFa	A/T	95655 D4000 95655 D4100	1.01, 1.02, 1.03	1.04
UMa		95655 C6000	1.00	1.01
YDm		95660 B0000	1.00, 1.01	1.02
YP		95655 A9000 95655 A9100	1.00	1.01

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

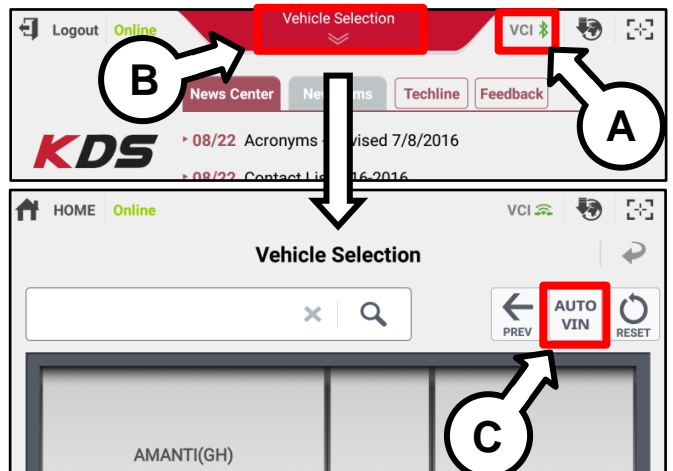
The ECU upgrade function on KDS is operating wirelessly. It is not necessary to perform the upgrade via USB cable.



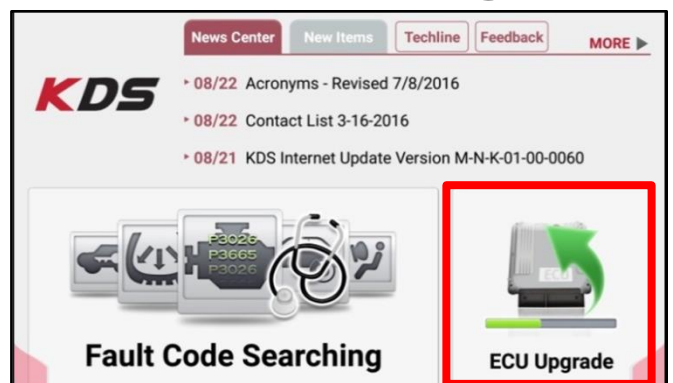
2. With the ignition ON, turn ON the KDS tablet. Select **KDS** from the home screen.



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



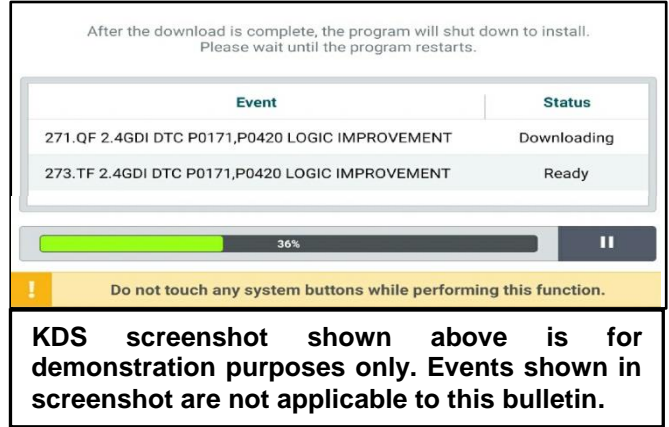
4. Select **ECU Upgrade**.



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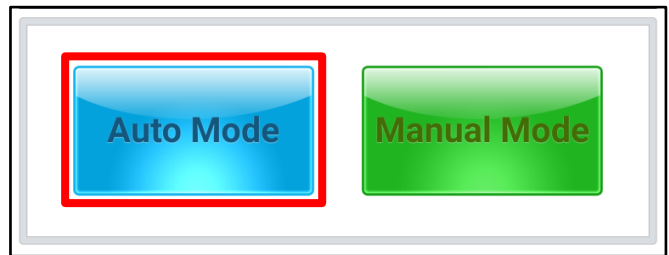
- The KDS will check the server for recently uploaded Events and then automatically download **Upgrade Event #313, #314, #315 or #316**.

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



- Select **Auto Mode**.

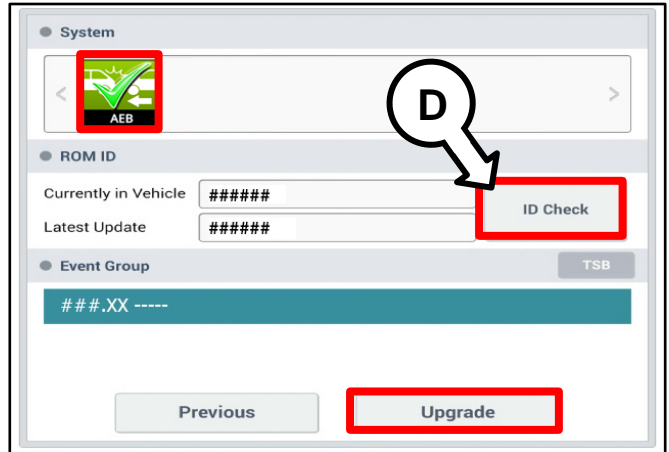
CAUTION
 Do NOT attempt to perform a Manual Mode upgrade UNLESS Auto Mode fails. Always follow the instructions given on the KDS in either Auto or Manual mode.



- Select the **AEB** system under the System selection menu.

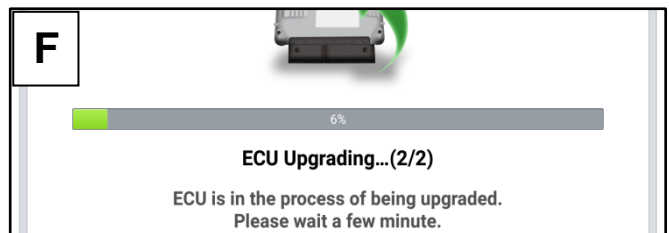
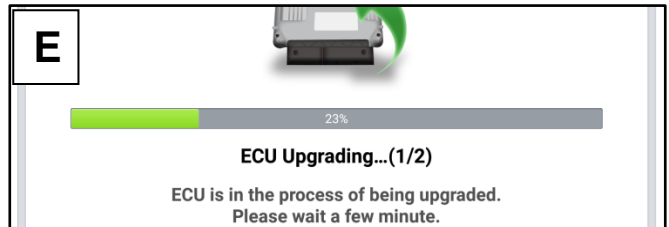
Touch **ID Check** (D) and confirm that the latest update is available.

Select **Upgrade Event #313, #314, #315 or #316** 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.



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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

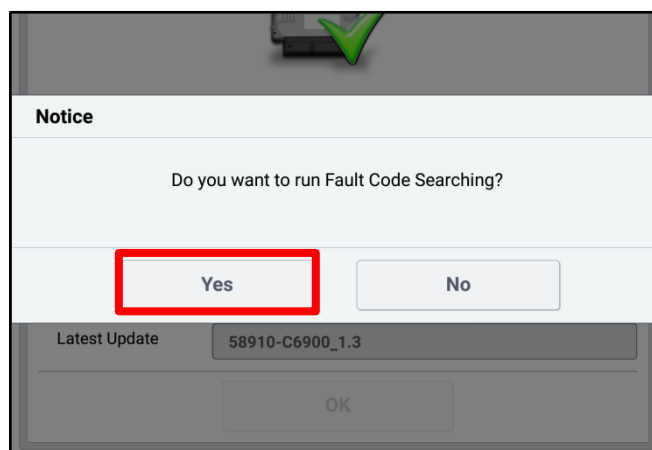
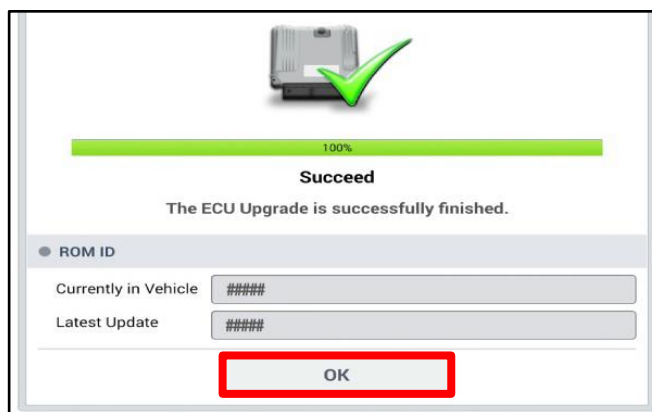
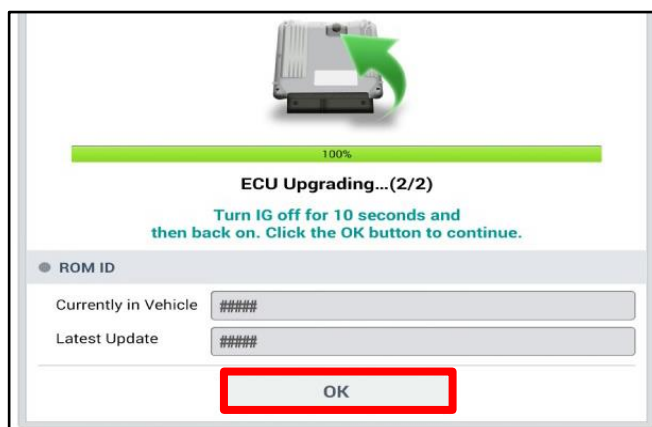
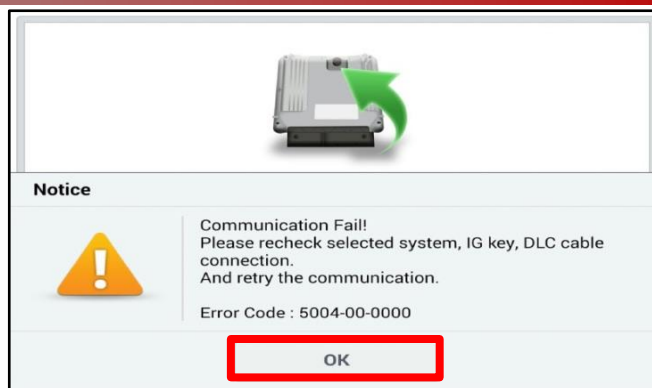
If an error notice continues to appear or if the upgrade cannot be performed, contact Techline or GIT America Help Desk.

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

Model	Menu	Password
JFa	JFA AEB : 95655-D4000/100	4100
UMa	UMA AEB : 95655-C6000	6000
YDm	YDM AEB : 95660-B0000	5660
YP	YP AEB : 95655-A9000/100	9100

1. Within the ECU Upgrade screen displayed, select **Manual Mode**.
2. Select the **AEB** system under the System selection menu. Select **Upgrade Event #313, #314, #315, or #316** 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.

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AFFECTED VEHICLE RANGE:

Model	Production Date Range
Optima (JFa)	October 21, 2015 through December 22, 2016
Sorento (UMa)	April 5, 2016 through February 8, 2017
Forte (YDm)	May 23, 2016 through March 3, 2017
Sedona (YP)	June 25, 2016 through January 16, 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	V	95655 D4000	0	(SA400) AEB Logic Improvement	180A05R0	0.3 M/H	N/A	0
UMa		95655 C6000			180A05R0			
YDm		95660 B0000			170M19R0			
YP		95655 A9000			170004R0			

★ NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference **SA400** when accessing the WebDCS system.