

SC179	August 2019
NUMBER	DATE
Safety Recall Campaign	2019MY Optima (JFa)
GROUP	MODEL

## SAFETY RECALL CAMPAIGN

SUBJECT: JFA MFC/FCA OPERATION

LOGIC IMPROVEMENT (SC179)

This bulletin provides the procedure to improve the logic of the Multi-Function Camera (MFC) / Forward Collision-Avoidance Assist (FCA) software on some 2019MY Optima (JFa) vehicles, produced from May 21, 2018 through May 29, 2019, which may cause the braking assist function to not work properly when the MFC/FCA system senses a potential frontal collision with a stationary vehicle. To correct this concern, install the improved logic to the MFC/FCA using the KDS ECU Upgrade function as described in this bulletin. For confirmation that the latest reflash has been installed to the vehicle you are working on, verify the ROM ID using the table on page 2 of this bulletin. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.



Kia Diagnostic System (KDS)

### \* NOTICE

There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected vehicle until it has been repaired pursuant to the procedures set forth in this bulletin.

### \* NOTICE

To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.

File Under: <Safety Recall Campaign>

☑ Service Advisors ☑ Technicians ☑ Body Shop Manager ☑ Fleet Repair

## JFA MFC/FCA OPERATION LOGIC IMPROVEMENT (SC179)

#### **ECU Upgrade Procedure:**

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

#### **Upgrade Event Name**

431.JFA PE MFC FCA OPERATION LOGIC IMPROVEMENT

#### \* NOTICE

- A fully charged battery is necessary before the ECU upgrade can take place. It is recommended that the Midtronics GR8-1299 be used in ECU mode during reflashing or the use of a fully charged jump starter box.
- DO NOT connect any other battery charger to the vehicle during ECU upgrade.
- Ensure the KDS or GDS is sufficiently charged prior to reflash.
- 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 and 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 #431**

Model	EM	ТМ	IMMO	ECU P/No.	M ID	
Wodei	□IVI	I IVI	IIVIIVIO	ECU P/NO.	Previous	New
JFa	1.6T 2.0T AT	Yes	95595 D5000	1.00	1.00	
		AI	AT Tes	95895 D5001	1.01 1.02	1.00

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.

## JFA MFC/FCA OPERATION LOGIC IMPROVEMENT (SC179)

### \* NOTICE

Prior to performing the ECU upgrade, be sure to check that the KDS is fully charged.

 Connect the VCI-II to the OBD-II connector, located under the driver's side of the instrument panel.

### \* NOTICE

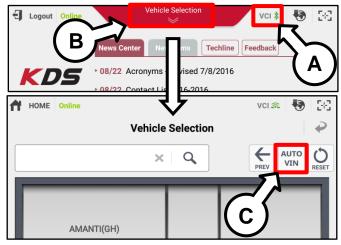
The ECU upgrade function on KDS operates wirelessly. It is not necessary to perform the upgrade via USB cable.

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

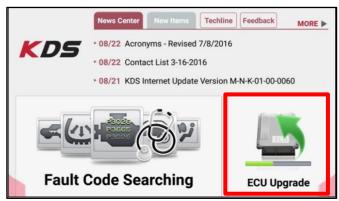




3. Confirm communication with VCI (A) and then configure the vehicle (B) using the **AUTO VIN** (C) feature.



4. Select **ECU Upgrade**.



SUBJECT:

## JFA MFC/FCA OPERATION LOGIC IMPROVEMENT (SC179)

 The KDS will check the server for recently uploaded Events and then automatically download Upgrade Event #431.

### \* NOTICE

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

After the download is complete, the program will shut down to install. Please wait until the program restarts.

Event Status

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 this function.

KDS screenshot shown above is for demonstration purposes only. Events shown in screenshot are not applicable to this bulletin.

Select Auto Mode.

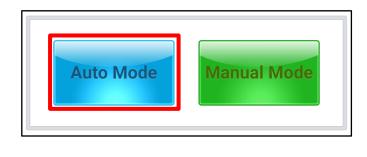


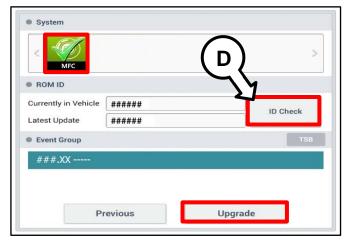
Do NOT attempt to perform a Manual Mode upgrade <u>UNLESS</u> <u>Auto Mode fails</u>. Always follow the instructions given on the KDS in either Auto or Manual mode.

Select the MFC system under the System selection menu.

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

Select **Upgrade Event #431** and select **Upgrade** to continue.

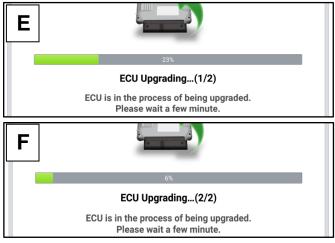




 The ECU upgrade will begin and the progress of the upgrade will appear on the bar graph. Upgrade part (1/2) (E) will download the upgrade event to the VCI-II. Upgrade part (2/2) (F) will upgrade the ECU.



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



## SUBJECT: JFA MFC/FCA OPERATION LOGIC IMPROVEMENT (SC179)

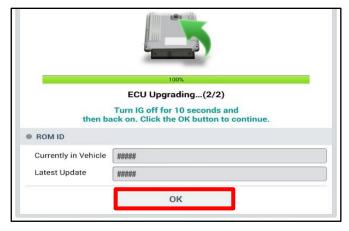
9. If a "Communication Fail" screen appears, verify that the VCI-II and KDS are communicating properly. Touch **OK** and restart the procedure from step 4.

### \* NOTICE

If an error notice continues to appear or if the upgrade cannot be performed, DO NOT disconnect the KDS/VCI-II. Contact GIT America Help Desk at (888) 542-4371 or Techline.

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

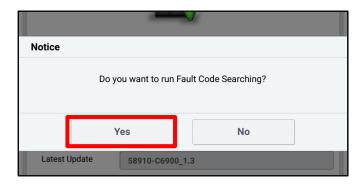




11. Once the upgrade is complete, touch **OK** to finalize the procedure.



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.

### JFA MFC/FCA OPERATION LOGIC IMPROVEMENT (SC179)

#### **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

Menu	Password
JFA PE FCA: 95895-D5000	5000

- 1. Within the ECU Upgrade screen displayed, select Manual Mode.
- 2. Select the **MFC** system under the System selection menu. Select **Upgrade Event #431** 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:

# JFA MFC/FCA OPERATION LOGIC IMPROVEMENT (SC179)

#### AFFECTED VEHICLE RANGE:

Model	Production Date Range			
Optima (JFa)	May 21, 2018 through May 29, 2019			

#### WARRANTY INFORMATION:

N Code: N99 C Code: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
R	95895 D5001	0	(SC179) JFA MFC/MPA ECU Logic Improvement	191A22R0	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>SC179</u> when accessing the WebDCS system.