

SUBJECT: HVAC CONTROL UNIT LOGIC IMPROVEMENT

This bulletin provides the procedure to apply a HVAC control unit logic improvement on some 2016MY Optima (JFa) vehicles, produced from August 28, 2015 through September 30, 2016, and some 2016MY Optima (JF) vehicles, produced from February 2, 2016 through November 23, 2016, equipped with Fully Automatic (FATC) or Manual Temperature (MTC) Controls, which may experience a concern with the evaporator icing under specific driving and ambient temperature and/or humidity conditions. Follow the procedure outlined in this bulletin to apply the HVAC control unit logic improvement to either A/C units using KDS download. 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 Diagnostic System (KDS)

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ECU Upgrade Procedure:

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

Upgrade Event Name	
318. JFA A/C PERFORMANCE LOGIC IMPROVEMENT (MTC)	
319. JFA A/C PERFORMANCE LOGIC IMPROVEMENT (FATC)	
320. JF A/C PERFORMANCE LOGIC IMPROVEMENT (MTC)	

***** 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.

ROM ID INFORMATION TABLE:

Upgrade	Event 318,	319 (JFa), 320	(JF)
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Model	Event No	Sustem		ROM ID		
Model	Event No.	System ECU P/NO.		Previous	New	
JFa	318	MTC	97250-D5500 97250-D5510	100.00	101.00	
	240	EATO	97250-D5001 97250-D5701	1.01	New 101.00 1.02 1.09 101.00	
	519	FAIC	97250-D5000 97250-D5700	1.00		
JF	320	МТС	97250-D5500 97250-D5510	100.00	101.00	

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.

***** 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 1. 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.

Select ECU Upgrade. 4.



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 The KDS will check the server for recently uploaded Events and then automatically download the applicable Upgrade Event (318 or 319).

***** 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 **AIRCON** system under the System selection menu.

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

Select the appropriate **Upgrade Event** (**318 or 319**) 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.





Auto Mode Manual Mode

• System		\frown	
			>
		<u> </u>	
Currently in Vehicle	######		ID Check
Latest Update	######		
Event Group			TSB
###.XX			
P	revious	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.



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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.

 Notice

 Communication Fail!

 Please recheck selected system, IG key, DLC cable connection.

 And retry the communication.

 Error Code : 5004-00-0000

	100%
	ECU Upgrading(2/2)
then ba	Turn IG off for 10 seconds and ck on. Click the OK button to continue.
ROM ID	
Currently in Vehicle	#####
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.

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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 Manual Mode passwords.

Manual Mode Upgrade Passwords

Menu	Password			
JFA MTC : 97250-D5500/510	5510			
JFA FATC : 97250-D5001/701	5710			
JFA FATC : 97250-D5000/700	5700			
JF MTC : 97250-D5500/510	5510			

- 1. Within the ECU Upgrade screen displayed, select **Manual Mode** and then select the applicable **Upgrade Event (318 or 319)**.
- 2. Select the appropriate control unit part number with reference to the ROM ID Information Table on pages 2, and select **OK**.
- 3. Enter the appropriate password from the Manual Mode password table above and select **OK**.
- 4. The upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 5. When instructed on the KDS, turn the ignition **OFF** for ten (10) seconds then back on. Touch **OK** to continue.
- 6. Once the upgrade is complete, touch **OK** to finalize the procedure.
- 7. 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.
- 8. Start the engine to confirm proper operation of the vehicle.

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AFFECTED VEHICLE RANGE:

Model	Production Date Range		
Optima (JFa)	August 28, 2015 through September 30, 2016		
Optima (JF)	February 2, 2016 through November 23, 2016		

WARRANTY INFORMATION:

N Code: I42 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	97250 D5500WK	0	HVAC Control Unit Logic Improvement	97250F05	0.3 M/H	N/A	0