


SB-10057053-8367

 HYUNDAI NEW THINKING. NEW POSSIBILITIES. Technical Service Bulletin	GROUP	NUMBER
	FUEL SYSTEM	14-FL-006
	DATE	MODEL(S)
	November, 2014	ELANTRA (MD/UD)
SUBJECT:	ECM UPDATE – P2096 AND/OR MISFIRE DTC(s)	

ECU Update

THIS TSB SUPERSEDES TSB 13-FL-006 WITH A REVISED ECM UPDATE AND OP CODE.

Description: This bulletin provides an ECM update to revise the diagnostic logic for the following DTC(s):

2011-2012MY

- P2096: Post Catalyst Fuel Trim System too Lean(Bank1)
- P0301/2/3/4: Cylinder-1/2/3/4 Misfire detected

2013MY

- P2096: Post Catalyst Fuel Trim System too Lean(Bank1)

Applicable Vehicles: 2011-2013 ELANTRA (MD/UD)

GDS Information:

EVENT #	DESCRIPTION
330	"330. UD/MD 1.8MPI ENGINE DTC P2096 IMPROVEMENT"

Warranty Information:

Model	Op Code	Operation	Op Time	Causal Part #
ELANTRA (MD/UD)	39101F17	ECM UPGRADE	0.3 M/H	(See NOTE)

NOTE: Use the applicable ECM P/N listed in the ECM ROM ID Information Table from the following pages.

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

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ECM ROM ID INFORMATION TABLE:

Verify the ECM ROM ID before updating the vehicle's software. Refer to the table below.

MY	Emission	ECM P/N	T/M	IMMO	ROM ID	
					Previous	New
11MY	SULEV	39101-2EMA0 (MD/UD)	AT	YES (Start-Stop Button)	MD1SP1MS294B MD1SP1MS294C MD1SP1MS294D MD1SP1MS294E MD1SP1MS296A MD1SP1MF2E3A	MD1SP1MF2EAA
		39103-2EMA0 (MD/UD)		NO (Key Start)	MD1SP1NS294B MD1SP1NS294C MD1SP1NS294D MD1SP1NS294E MD1SP1NS296A MD1SP1NF2E3A	MD1SP1NF2EAA
	ULEV	39101-2EMB0 (MD/UD)	AT	YES (Start-Stop Button)	MD1UP1MS294B MD1UP1MS294C MD1UP1MS294D MD1UP1MS294E MD1UP1MS296A MD1UP1MF2E3A	MD1UP1MF2EAA
		39103-2EMB0 (MD/UD)	AT	NO (Key Start)	MD1UP1NS294B MD1UP1NS294C MD1UP1NS294D MD1UP1NS294E MD1UP1NS296A MD1UP1NF2E3A	MD1UP1NF2EAA
39107-2EMB0 (MD/UD)	MT	MD1UP1NS294B MD1UP1NS294C MD1UP1NS294D MD1UP1NS294E MD1UP1NS296A MD1UP1NF2E3A				

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MY	Emission	ECM P/N	T/M	IMMO	ROM ID	
					Previous	New
12MY	SULEV	39101-2EMA2 (MD/UD)	AT	YES (Start-Stop Button)	MD2SP1MS2B0A MD2SP1MS2B4A MD2SP1MS2B4B MD2SP1MS2B4C MD2SP1MS2B7A MD2SP1MF2E3A	MD2SP1MF2EAA
		39101-2EMN2 (MD)			MD2SP1MS2B7A MD2SP1MF2E3A	
		39103-2EMA2 (MD/UD)		NO (Key Start)	MD2SP1NS2B0A MD2SP1NS2B4A MD2SP1NS2B4B MD2SP1NS2B4C MD2SP1NS2B7A MD2SP1NF2E3A	MD2SP1NF2EAA
		39103-2EMN2 (MD)			MD2SP1NS2B7A MD2SP1NF2E3A	
	ULEV	39101-2EMB2 (MD/UD)	AT	YES (Start-Stop Button)	MD2UP1MS2B0A MD2UP1MS2B4A MD2UP1MS2B4B MD2UP1MS2B4C MD2UP1MS2B7A MD2UP1MF2E3A	MD2UP1MF2EAA
					39101-2EMP2 (MD)	
		39103-2EMB2 (MD/UD)	AT	NO (Key Start)	MD2UP1NS2B0A MD2UP1NS2B4A MD2UP1NS2B4B MD2UP1NS2B4C MD2UP1NS2B7A MD2UP1NF2E3A	MD2UP1NF2EAA
					39103-2EMP2 (MD)	
39107-2EMB2 (MD/UD)	MT		MD2UP1NS2B0A MD2UP1NS2B4A MD2UP1NS2B4B MD2UP1NS2B4C MD2UP1NS2B7A MD2UP1NF2E3A			

SUBJECT:

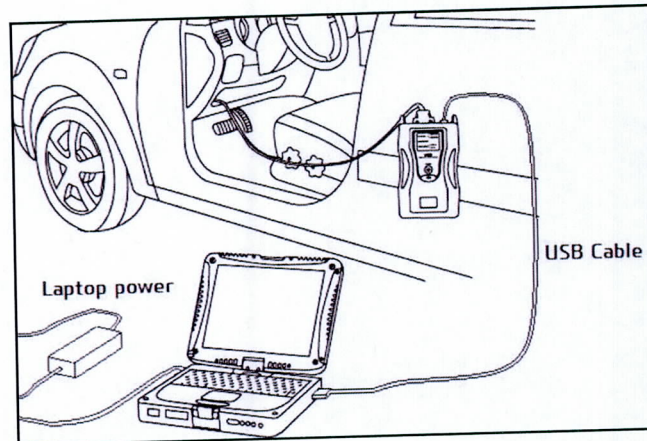
ECM UPDATE – P2096 AND/OR MISFIRE DTC(s)

MY	Emission	ECM P/N	T/M	IMMO	ROM ID		
					Previous	New	
13MY	SULEV	39101-2EMA3 (UD)	AT	YES (Start-Stop Button)	MD3SP1MS2D2A MD3SP1MS2D2B MD3SP1MS2D8A MD3SP1MS2E3A	MD3SP1MF2EAA	
		39101-2EMN3 (MD)			MD3SP1MS2D2A MD3SP1MS2D2B MD3SP1MS2D8A MD3SP1MS2E3A		
		39103-2EMA3 (UD)		NO (Key Start)	MD3SP1NS2D2A MD3SP1NS2D2B MD3SP1NS2D8A MD3SP1NS2E3A	MD3SP1NF2EAA	
		39103-2EMN3 (MD)			MD3SP1NS2D2A MD3SP1NS2D2B MD3SP1NS2D8A MD3SP1NS2E3A		
	ULEV	AT	39101-2EMB3 (UD)	YES (Start-Stop Button)	MD3UP1MS2D2A MD3UP1MS2D2B MD3UP1MS2D8A MD3UP1MS2E3A	MD3UP1MF2EAA	
			39101-2EMP3 (MD)		MD3UP1MS2D2A MD3UP1MS2D2B MD3UP1MS2D8A MD3UP1MS2E3A		
		MT	AT	39103-2EMB3 (UD)	NO (Key Start)	MD3UP1NS2D2A MD3UP1NS2D2B MD3UP1NS2D8A MD3UP1NS2E3A	MD3UP1NF2EAA
				39103-2EMP3 (MD)		MD3UP1NS2D2A MD3UP1NS2D2B MD3UP1NS2D8A MD3UP1NS2E3A	
			39107-2EMB3 (MD/UD)	MD3UP1NS2D2A MD3UP1NS2D2B MD3UP1NS2D8A MD3UP1NS2E3A			

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GENERAL PRECAUTIONS:

- Connect the USB cable between the GDS and the VCI.
- Connect the 16-pin DLC connector from the VCI into the DLC located under the driver's side dash.



NOTICE

Make sure the battery icon at the bottom right of the GDS laptop shows at least 50%; if not, charge the GDS or attach a battery charger.

- Turn off all lights (Do not leave the headlight switch in auto mode) and all accessories (including heater/air conditioner/fan, audio, heated seats, rear defroster, etc) to ensure the battery will not be discharged during the update.
- Perform the update with the ignition key in the ON position. (Turn the ignition key to ON position or press the Start-Stop Button two times without depressing the brake pedal).
- Do not disconnect any cables connected to the vehicle or the GDS during the update.
- Do not start the engine or turn the ignition switch OFF during the update.

NOTICE

Confirm your GDS has the most recent version. If not, connect the GDS to an Internet port, open the GDS home page and select "Update". Refer to instructions on hmaservice.com if necessary.

If you encounter GDS related problems, call the GIT Helpline at 888-437-0308.

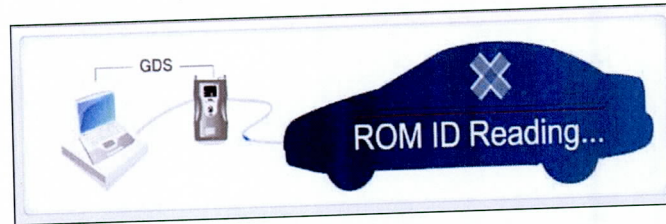
SERVICE PROCEDURE:

GDS AUTO MODE ECM UPDATE PROCEDURE

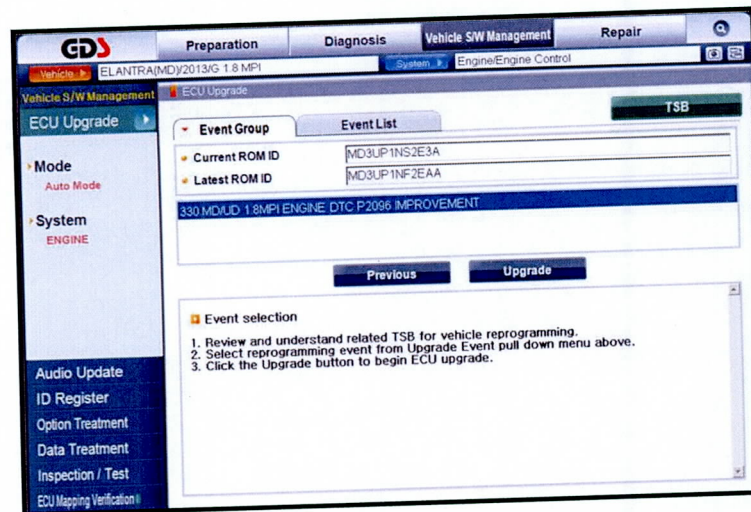
1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **Engine** as the system and then select **OK**.
3. Select **Auto Mode** and then select **Next**.

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4. From the **System** tab, select **Engine** and then select **OK**. The GDS will read the ROM ID. Confirm the ROM is applicable as shown on Page 2-3, "ECM ROM ID Information".
NOTE: Record the ECM ROM ID in case the auto update fails and a manual update is needed.



5. Update event "330. UD/MD 1.8MPI ENGINE DTC P2096 IMPROVEMENT" will display. Select **Upgrade**.



6. If the screen indicates "**Voltage is OK**" (voltage > 12volts), select **OK**. If not, select **CANCEL** and charge the vehicle battery by running the engine for 10 minutes.
7. Updating will occur until 100% is reached on the bar graph. At the prompt, turn the ignition key OFF for 10 seconds, then turn it ON and select **OK**.
8. The GDS will confirm that ECM reprogramming is successfully finished. Select **OK**.
9. If the ECM update was not successful, go to **GDS MANUAL MODE ECM UPDATE PROCEDURE**.
10. Check for DTC in all systems and Erase All DTC that stored due to loss of CAN communication during the ECM Update.
11. Turn **OFF ignition for 10 seconds** then turns **ON** before going to engine start.
12. Start the engine to confirm proper operation.

NOTICE

In the event of AUTO MODE update failure:

- You must attempt **MANUAL MODE**. Use the ECM P/N from the vehicle's ECM label if it is not clear from the ROM ID Table as to the correct ECM P/N to use for your vehicle.
- Replacing an ECM without carefully documenting that a **MANUAL MODE** update attempt was made may result in claims charged back.

GDS MANUAL MODE ECM UPDATE PROCEDURE**NOTICE**

- GDS Manual Mode is intended for recovery of an ECM Update should it begin but then later fail in process in the Auto Mode.
- The ECM connectors must be disconnected for 15 minutes to reset its contents then perform this Manual Mode Update.
- Do not force Manual Mode if you get an error in Auto Mode that the vehicle's current ROM ID did not apply.
- It is critical to identify the correct ECM Part Number in the PASSWORD table or the ECM may be permanently damaged. It is recommended to remove ECM and read the part number from the label to confirm.

1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **Engine** as the system and then select **OK**.
3. Select **Manual Mode** and then select **Next**.
4. From the **System** tab, select **Engine** and then select **OK**.
5. Select update event "**330. UD/MD 1.8MPI ENGINE DTC P2096 IMPROVEMENT**", then select **Next**.
6. **Be certain to select the exact appropriate ECU of the vehicle**, select **Upgrade**, enter corresponding password from the table below and select **OK**.

MENU	KEY TYPE	PASSWORD
UD/MD 1.8 AT IMMO : 39101-2EMA0	Start-Stop Button	0120
UD/MD 1.8 AT IMMO : 39101-2EMB0	Start-Stop Button	0121
UD/MD 1.8 AT NON IMMO : 39103-2EMA0	Key Start	0122
UD/MD 1.8 AT/MT NON IMMO : 39103/39107-2EMB0	Key Start	0123
UD/MD 1.8 AT IMMO : 39101-2EMA2/2EMN2	Start-Stop Button	0124
UD/MD 1.8 AT,MT IMMO : 39101-2EMB2/2EMP2	Start-Stop Button	0125
UD/MD 1.8 AT NON IMMO : 39103-2EMA2/2EMN2	Key Start	0126
UD/MD 1.8 AT,MT NON IMMO : 39103-2EMB2/2EMP2, 39107-2EMB2	Key Start	0127
UD/MD 1.8 AT IMMO : 39101-2EMA3/2EMN3	Start-Stop Button	0128
UD/MD 1.8 AT,MT IMMO : 39101-2EMB3/2EMP3	Start-Stop Button	0129
UD/MD 1.8 AT NON IMMO 39103-2EMA3/2EMN3	Key Start	0130
UD/MD 1.8 AT,MT NON IMMO : 39103-2EMB3/2EMP3, 39107-2EMB3	Key Start	0131

7. The remaining steps are the same as Steps 6~12 of the Auto Procedure.