SUBJECT: 2013 MY ELANTRA (MD) ECM & TCM UPDATE (SERVICE CAMPAIGN TS4)

GDS 🔵 HYUNDAI Global Diagnostic System ECU Update

★ IMPORTANT

*** Retail Vehicles Only ***

Dealers must perform this Campaign whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description: This bulletin provides a procedure to update the ECM and TCM software for 2013 Elantra (MD) vehicles with the latest update to:
- Revise the shift feeling in ECO mode.
- Revise logic for P2096: Post Catalyst Fuel Trim System too Lean (Bank 1).

Applicable Vehicles: 2013 MY Elantra (MD) 1.8L vehicles with automatic transmission (KMHDH***)
Applicable Production Date Range: From March 8, 2012 through August 16, 2012

GDS Information:

EVENT #	DESCRIPTION
306	306.UD/MD 1.8 P2096 DTC LOGIC IMPROVEMENT
290	290.13MY MD 1.8 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT-TCM

Warranty Information:

MODEL	OP CODE	OPERATION	OP TIME
Elantra (MD)	30C082R0	ECM & TCM UPGRADE	0.5

NOTE: Submit claim on Campaign Claim Entry Screen

Circulate To: Service Manager, Warranty Manager, Service Advisors, Technicians, Fleet Repair

ECM ROM ID INFORMATION TABLE: Verify the ECM ROM ID before updating vehicle software.

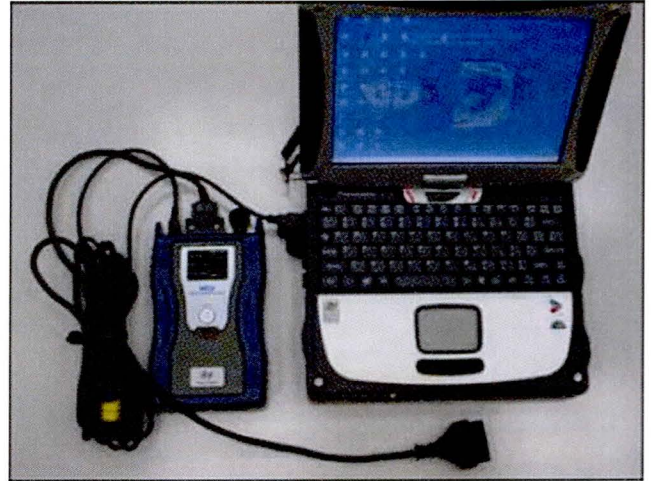| MODEL	EMISSION	ECM P/N	IMMO	ECM ROM ID	
				PREVIOUS	**NEW**
MD 1.8L 13MY	SULEV	39101-2EMN3	YES	MD3SP1MS2D2A MD3SP1MS2D2B MD3SP1MS2D8A	MD3SP1MS2E3A
		39103-2EMN3	NO	MD3SP1NS2D2A MD3SP1NS2D2B MD3SP1NS2D8A	MD3SP1NS2E3A
	ULEV	39101-2EMP3	YES	MD3UP1MS2D2A MD3UP1MS2D2B MD3UP1MS2D8A	MD3UP1MS2E3A
		39103-2EMP3	NO	MD3UP1NS2D2A MD3UP1NS2D2B MD3UP1NS2D8A	MD3UP1NS2E3A

TCM ROM ID TABLE: Verify the TCM ROM ID before updating vehicle software.

MODEL	MY	TCM P/N	TCM ROM ID	
			PREVIOUS	**NEW**
ELANTRA (MD) 1.8L	13MY	39101-2EMN3 39103-2EMN3 39101-2EMP3 39103-2EMP3	TMD0C18NA8	TMD0C18NA9

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 the 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.
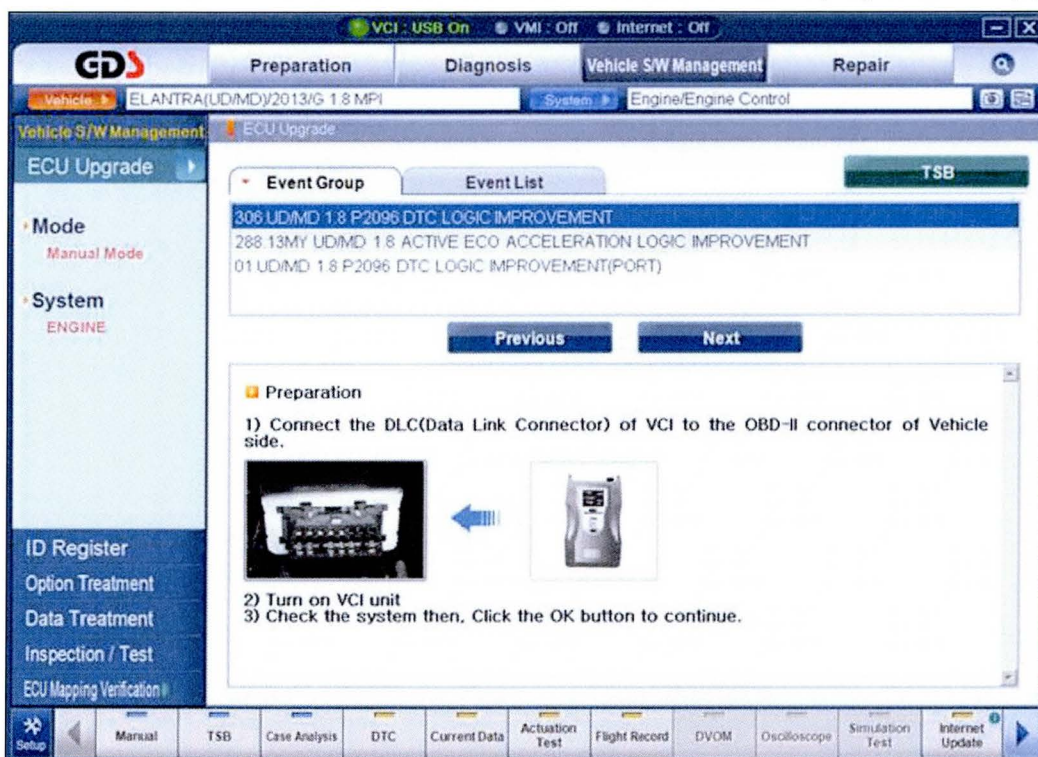

NOTICE

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

ECM UPDATE

GDS <u>AUTO</u> 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**.

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

5. Update event **306.UD/MD 1.8 P2096 DTC LOGIC IMPROVEMENT** will display. Select **Upgrade.**

6. If the screen indicates **"Voltage is OK"**, 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 <u>MANUAL</u> MODE <u>ECM</u> UPDATE PROCEDURE.**

10. Check for Diagnostic Trouble Codes and erase any DTC.
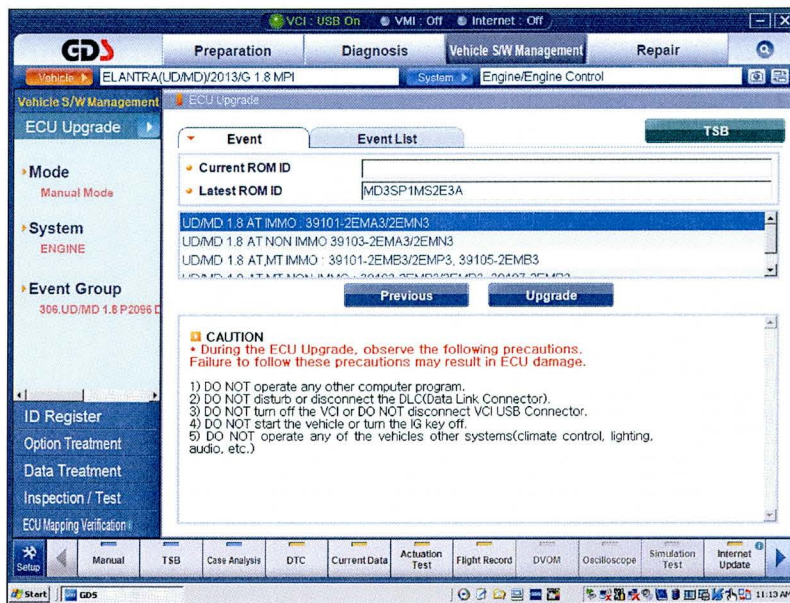
11. Start the engine to confirm proper operation.

GDS <u>MANUAL</u> MODE ECM UPDATE PROCEDURE

NOTICE

In the event of AUTO MODE update failure (after the progress bar was initiated):
- You must attempt MANUAL MODE. Use the ECM P/N from the vehicle's ECM label if the correct ECM P/N is not clear from the ROM ID table.
- Replacing an ECM without carefully documenting that a MANUAL MODE update attempt was made will result in a charge back of your claim.

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 **NEXT.**

5. Select Update event **306.** Select **Next.**

6. Select the correct ROM according to PCM part number on the PCM label. Select **Upgrade.**

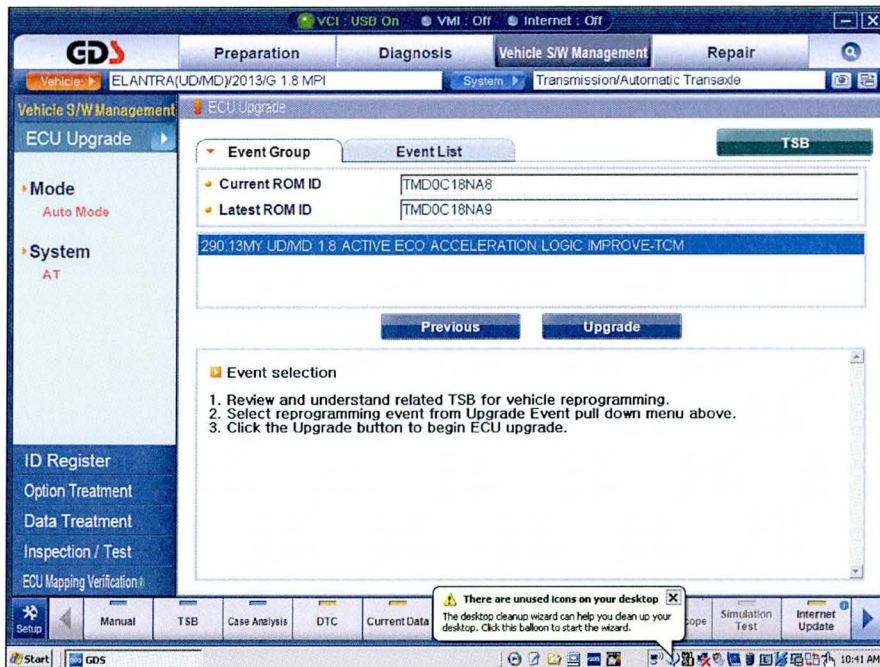7. Enter the Password and click **OK.**

MENU	PASSWORD
UD/MD 1.8 AT IMMO : 39101-2EMA3/2EMN3	0123
UD/MD 1.8 AT NON IMMO 39103-2EMA3/2EMN3	0323
UD/MD 1.8 AT,MT IMMO : 39101-2EMB3/2EMP3, 39105-2EMB3	0523
UD/MD 1.8 AT,MT NON IMMO : 39103-2EMB3/2EMP3, 39107-2EMB3	0723

8. If the **"Voltage is OK",** select **OK.** If not, select **CANCEL** and charge the vehicle battery.

9. The remaining steps are the same as Step 7~11 of the Auto Procedure.

TCM UPDATE

GDS <u>AUTO</u> MODE TCM UPDATE PROCEDURE

1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **AT** as the system and then select **OK**.
3. Select **Auto Mode** and then select **Next**.
4. From the **System** tab, select **AT** and then select **OK**. The GDS will read the ROM ID. Confirm the ROM ID is applicable as shown on Page 2, "TCM ROM ID Information".
5. Update event **290.13MY UD/MD 1.8 ACTIVE ECO ACCELERATION LOGIC IMPROVE-TCM** will display. Select **Upgrade**.

6. If the screen indicates **"Voltage is OK"**, 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 TCM reprogramming is successfully finished. Select **OK**.
9. If the TCM update was not successful, go to **GDS <u>MANUAL</u> MODE <u>TCM</u> UPDATE PROCEDURE.**
10. Check for any Diagnostic Trouble Codes and erase any DTC.
11. From the home screen, select Vehicle, **AT** menu and **Option Treatment**. Select **Resetting Auto T/A Values** and follow the prompts on the screen.
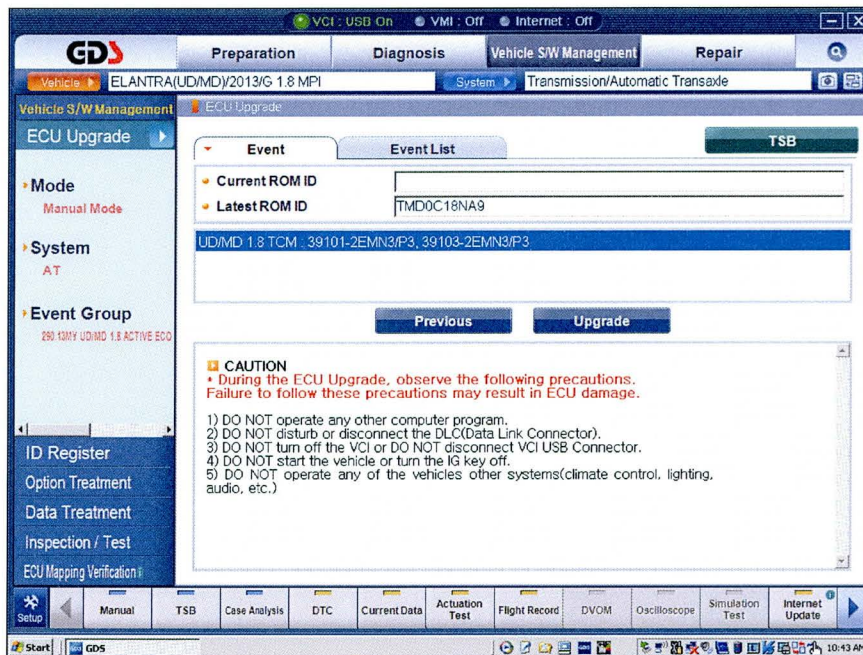12. Drive the vehicle to confirm proper operation.

GDS <u>MANUAL</u> MODE TCM UPDATE PROCEDURE

NOTICE

In the event of AUTO MODE update failure (after the progress bar was initiated):
- You must attempt MANUAL MODE. Use the ECM P/N from the vehicle's ECM label if the correct ECM P/N is not clear from the ROM ID table.
- Replacing an ECM without carefully documenting that a MANUAL MODE update attempt was made will result in a charge back of your claim.

1. From the GDS home page, select **ECU Upgrade**. If necessary, select the VIN.
2. Select **AT** as the system and then select **OK**.
3. Select **Manual Mode** and then select **NEXT**.
4. From the **System** tab, select **AT** and then select **NEXT**.
5. Update event **290.13MY UD/MD 1.8 ACTIVE ECO ACCELERATION LOGIC IMPROVE-TCM** will display. Select **Next**.
6. Select the ROM according to the part number on the PCM label. Select **Upgrade**.

7. Enter the Password and click **OK**.

MENU	PASSWORD
UD/MD 1.8 TCM : 39101-2EMN3/P3, 39103-2EMN3/P3	0323

8. If the **"Voltage is OK",** select **OK**. If not, select **CANCEL** and charge the vehicle battery.
9. The remaining steps are the same as Step 7~12 of the Auto Procedure.