	GROUP	NUMBER
HYUNDAI NEW THINKING. NEW POSSIBILITIES.	CAMPAIGN	13-01-015
Technical Service Bulletin	DATE	MODEL
	MARCH 2013	TUCSON (LM)

TUCSON (LM) ECM & TCM UPDATE (SERVICE CAMPAIGN TM9)

GDS HYUNDAI *Global Diagnostic System* ECU Update

Description: This bulletin provides a procedure to update the ECM and TCM software for 2013 Tucson (LM) 2.4L vehicles to revise the shift feeling in ECO mode.

This TSB supersedes TSB 12-01-042 to include retail vehicles.

★ IMPORTANT

*** DEALER STOCK AND RETAIL VEHICLES ***

Dealers must perform this Campaign on all affected vehicles prior to customer retail delivery and 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.

Applicable Vehicles: 2013 MY Tucson (LM) 2.4L with automatic transaxles
Applicable Production Date Range: From May 24, 2012 through October 4, 2012

GDS INFORMATION:

Event #	Description
EVENT #286	286.13MY LM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - ECM
EVENT #287	287.13MY LM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - TCM

WARRANTY INFORMATION:

MODEL	OP CODE	OPERATION	OP TIME
TUCSON (LM)	20C105R1	ECM & TCM UPGRADE	0.5

NOTE: Submit claim on Campaign Claim Entry Screen

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

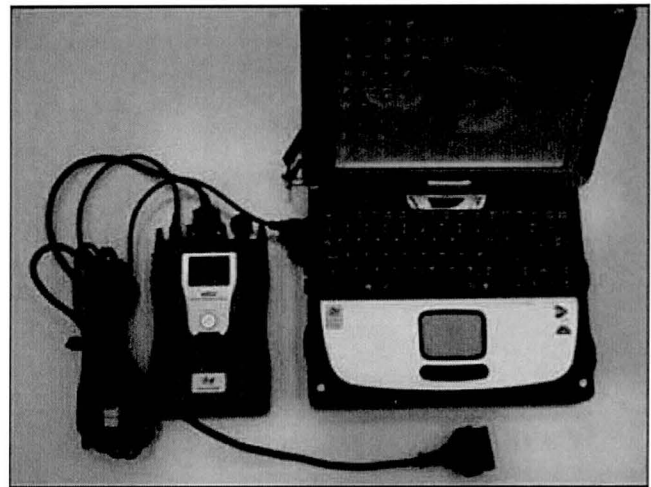| MODEL	ECM PART NUMBER	EMISSION	IGNITION	IMMO	ECM ROM ID PREVIOUS	ECM ROM ID NEW
TUCSON (LM) 2.4L	39106-2G803	ULEV	KEY	NO	LDC4MS0A	LDC4MT0B
	39106-2G813	ULEV	SSB	YES	LDC4RS0A	LDC4RT0B
	39106-2G823	SULEV	KEY	NO	LDS4MS0A LDS4MT0A	LDS4MT0B
	39106-2G883	SULEV	SSB	YES	LDS4RS0A LDS4RT0A	LDS4RT0B

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

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

MODEL	PCM (TCM) PART NUMBER	TCM ROM ID	
		PREVIOUS	NEW
TUCSON (LM) 2.4L	39106-2G803	TLM0C24NA6 TLM0C24NA7	TLM0C24N10
	39106-2G813		
	39106-2G823		
	39106-2G883		

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.

> ★ NOTE
>
> **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.
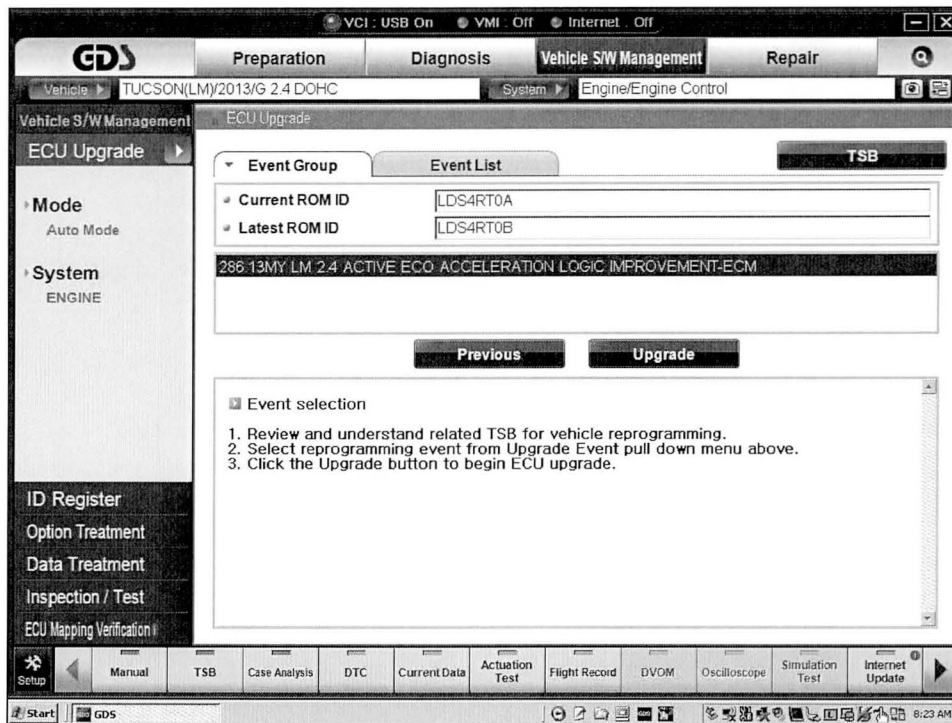
> ★ NOTE
>
> **Confirm your GDS has the most recent version. If not, connect the GDS to an Internet port, open the GDS home page and select "Update".**
> **If you encounter GDS related problems, call the GIT Helpline at 888-437-0308.**

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 is applicable as shown on Page 1, "ECM ROM ID Information". **NOTE**: Record the ROM ID in case the auto update fails and a manual update is needed.

5. Update event **286.13MY LM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - ECM** 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.

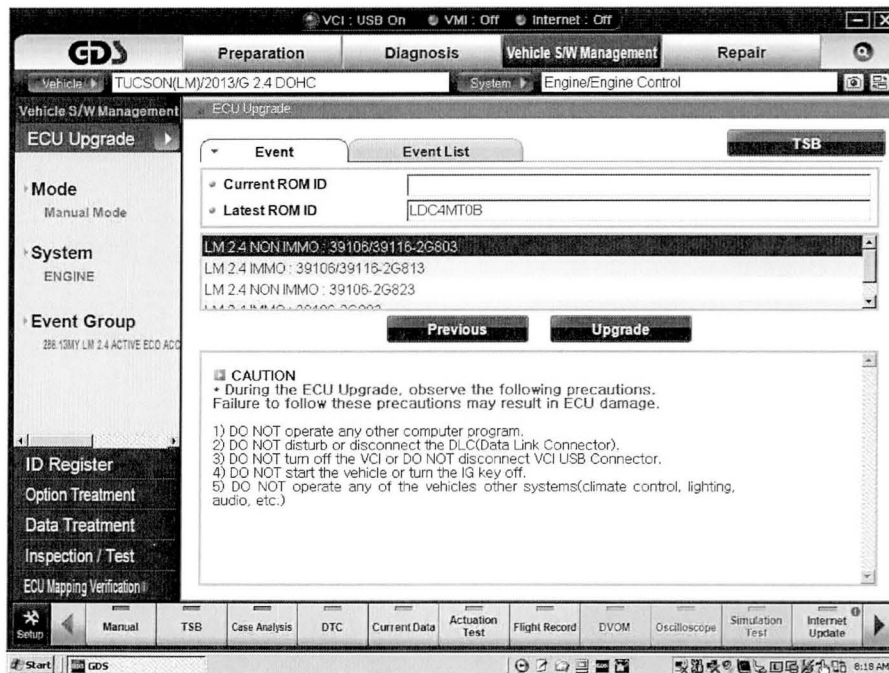11. Start the engine to confirm proper operation.

GDS MANUAL MODE ECM UPDATE PROCEDURE

> ## ★ NOTE
>
> In the event of AUTO MODE update failure (after it initiated the progress bar):
> - 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. Update event **286.LM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - ECM** will display. Select **Next**.
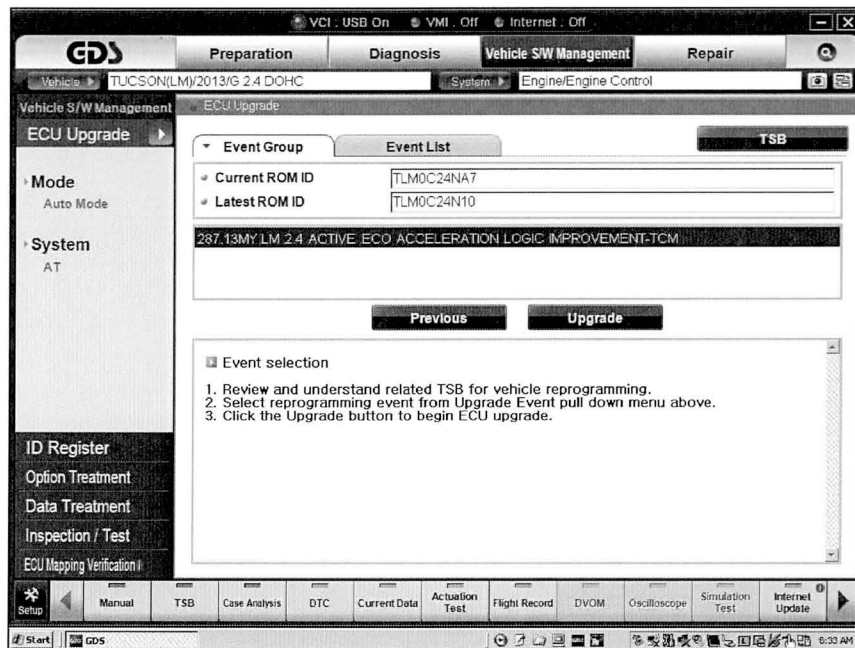6. Select the correct ROM according to ECM part number on the ECM label. Select **Upgrade**.

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

MENU	EMISSION	IGNITION	PASSWORD
LM 2.4 NON IMMO : 39106/39116-2G803	ULEV	KEY	2803
LM 2.4 IMMO : 39106/39116-2G813	ULEV	SSB	2813
LM 2.4 NON IMMO : 39106-2G823	SULEV	KEY	2823
LM 2.4 IMMO : 39106-2G883	SULEV	SSB	2883

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.

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 is applicable as shown on Page 1, "ROM ID Information".
5. Update event **287.13MYLM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - 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 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

> ★ **NOTE**
>
> In the event of AUTO MODE update failure (after it initiated the progress bar):
> - You must attempt MANUAL MODE. Use the TCM P/N from the vehicle's TCM label if the correct TCM P/N is not clear from the ROM ID table.
> - Replacing a TCM 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 **287.13MYLM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - TCM** will display. Select **Next.**
6. **LM 2.4L TCM 39106-2G803/13/23/83** will display. Select **Upgrade.**

6. Enter the Password and click **OK.** The part number can be found on the PCM label.

MENU	PASSWORD
LM 2.4L TCM – 39106-2G803/13/23/83	2883

7. If the **"Voltage is OK"**, select **OK.** If not, select **CANCEL** and charge the vehicle battery.
8. The remaining steps are the same as Step 7~12 of the Auto Procedure.
9. Check for DCT and erase any DTC. Drive the vehicle to confirm proper operation.