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Technical Service Bulletin

GROUP	NUMBER
CAMPAIGN	**14-01-007**
DATE	MODEL
JANUARY 2014	**TUCSON (LM)**

AUTOMATIC TRANSAXLE ECM & TCM UPDATE (SERVICE CAMPAIGN TS3)

GDS ⨁ HYUNDAI ECU Update
Global Diagnostic System

★ 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 Tucson (LM) 2.4L vehicles to:

- Revise the shift feeling in ECO mode

- To revise logic for the following DTCs:
  - ✓ P0300: Random/Multiple Cylinder Misfire Detected
  - ✓ P0301: Cylinder 1 – Misfire Detected
  - ✓ P0302: Cylinder 2 – Misfire Detected
  - ✓ P0303: Cylinder 3 – Misfire Detected
  - ✓ P0304: Cylinder 4 – Misfire Detected

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 #317	317. 13MY LM 2.4 MPI P030X DTC LOGIC IMPROVEMENT
EVENT #287	287.13MY LM 2.4 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT - TCM

WARRANTY INFORMATION:

MODEL	OP CODE	OPERATION	OP TIME
TUCSON (LM)	30C081R0	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
2013 TUCSON (LM) 2.4L	39106-2G803	ULEV	KEY	NO	LDC4MS0A LDC4MT0A LDC4MT0B	LDC4MT1B
	39106-2G813		SSB	YES	LDC4RS0A LDC4RT0A LDC4RT0B	LDC4RT1B
	39106-2G823	SULEV	KEY	NO	LDS4MS0A LDS4MT0A LDS4MT0B	LDS4MT1B
	39106-2G883		SSB	YES	LDS4RS0A LDS4RT0A LDS4RT0B	LDS4RT1B

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

MODEL	PCM (TCM) PART NUMBER	TCM ROM ID PREVIOUS	TCM ROM ID 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.
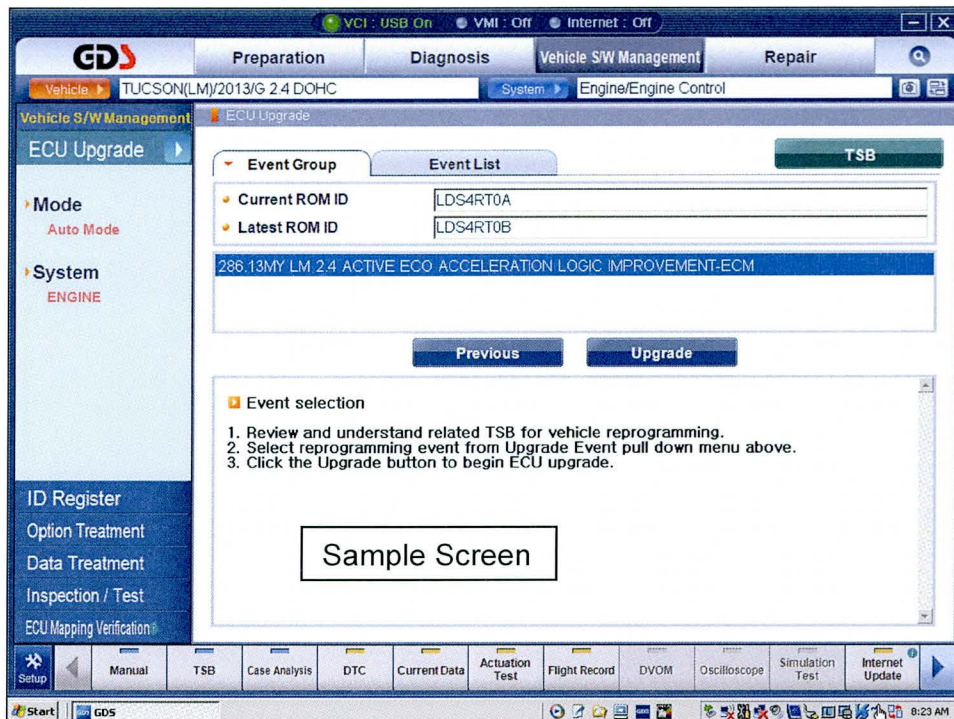
- Turn off all lights (Do not leave the headlight switch in auto mode) and all accessories (including heater/air conditioner/fan, audio, heated seats, rear defroster, etc) to ensure the battery will not be discharged during the update.

- 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.

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 **317.13MY LM 2.4 MPI P030X DTC LOGIC IMPROVEMENT** will display. Select **Upgrade.**
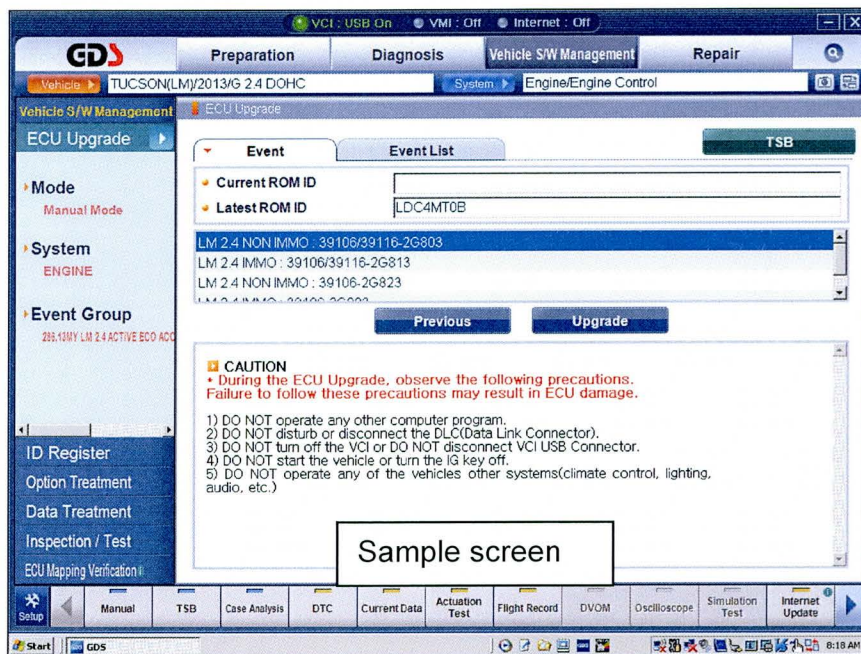

6. If the screen indicates **"Voltage is OK",** select **OK.** If not, select **CANCEL** and charge the vehicle battery by running the engine for 10 minutes.

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. Clear the DTC in the BlueLink system according to instructions in TSB 12-BE-005-2.

12. 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.

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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 **317.** Select **OK.**

6. Select the correct control module part number according to ECM part number on the ECM label. Select **Upgrade**.
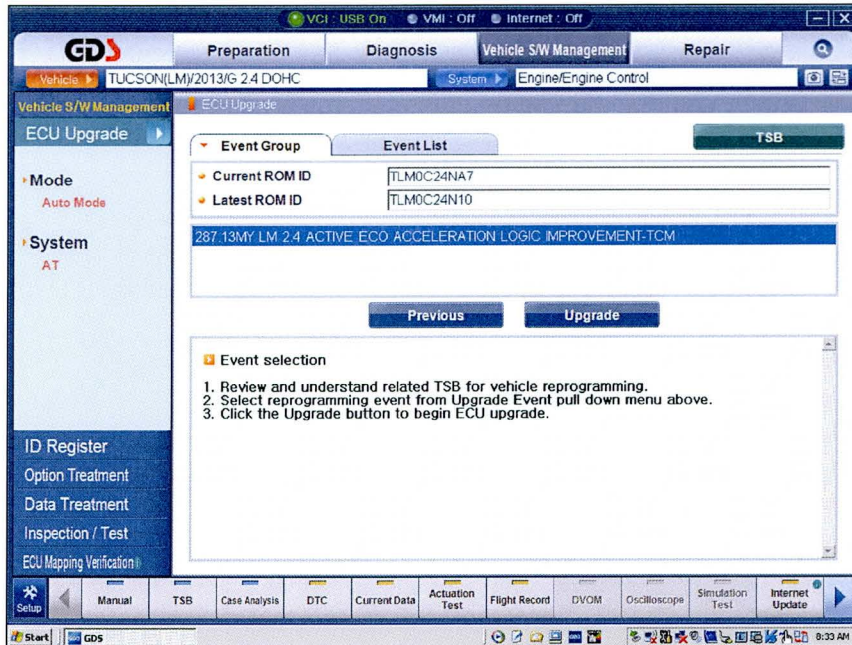

Sample screen

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

MENU	IGNITION	PASSWORD
13MY LM 2.4 ULEV NON IMMO : 39106/39116-2G803	KEY	2803
13MY LM 2.4 ULEV IMMO : 39106/39116-2G813	SSB	2813
13MY LM 2.4 SULEV NON IMMO : 39106-2G823	KEY	2823
13MY LM 2.4 SULEV IMMO : 39106-2G883	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 7~12 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. Clear the DTC in the BlueLink system according to instructions in TSB 12-BE-005-2.

12. From the home screen, select Vehicle, **AT** menu and **Option Treatment.** Select **Resetting Auto T/A Values** and follow the prompts on the screen.

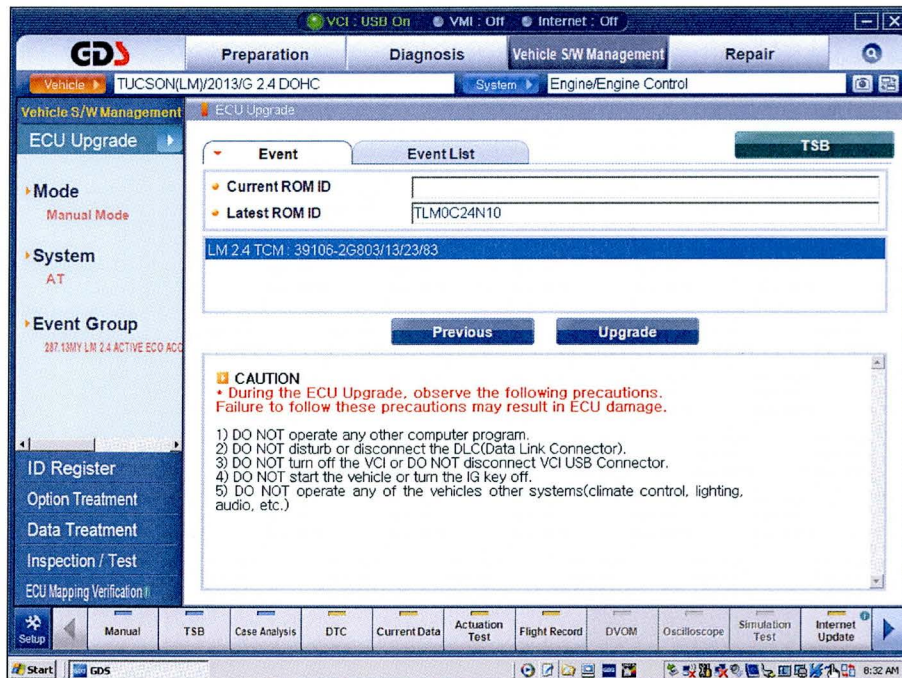13. Drive the vehicle to confirm proper operation.

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 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 **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.**

7. 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

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 7~13 of the Auto Procedure.