

 HYUNDAI NEW THINKING. NEW POSSIBILITIES.	GROUP FUEL SYSTEM	NUMBER 13-FL-011
	DATE OCTOBER 2013	MODEL TUCSON (LM)
Technical Service Bulletin		
SUBJECT ECM UPDATE – MIL ON DTC P0300/P0301/P0302/P0303/P0304		



ECU Update

★ NOTE:

This TSB contains different procedures than past ECU Updates, follow all the steps provided by this TSB.

Description:

This bulletin provides information for an ECM diagnostic code logic update on some 2012-2013MY Tucson 2.4L vehicles that may experience the following DTC:

- 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.

Note: This bulletin is associated with cold engine start rough idle only.

Applicable Vehicles:

- 12~13 MY TUCSON (LM) 2.4L MPI.

GDS Information:

EVENT #	DESCRIPTION
317 (or later compatible event)*	"LM 2.4 MPI P030X DTC LOGIC IMPROVEMENT"

(* the latest event that shows up in the Engine Auto Mode event list for the particular vehicle/engine)

Warranty Information:

Model	Op Code	Operation	Op Time	Causal P/N	Nature	Cause
TUCSON (LM)	39110F9K	ECM UPGRADE	0.3	(See NOTE)	N69	C40

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

★ NOTE:

In 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 warranty claim charge back.

ROM ID INFORMATION TABLE:

Model	MY	Emission	ECM P/N	T/M	IMMO (Start type)	ROM ID	
						Previous	New
LM 2.4L MPI	12MY	ULEV	39106-2G802	AT	No (key)	LCC4MP4A LCC4MQ0A LCC4MQ0B LCC4MR1A	LCC4MR1B
			39116-2G802	MT			
	13MY	SULEV	39106-2G822	AT	No (key)	LCS4MP4A LCS4MQ0A LCS4MQ0B LCS4MR1A	LCS4MR1B
		ULEV	39106-2G803	AT	No (key)	LDC4MS0A LDC4MT0A LDC4MT0B	LDC4MT1B
			39116-2G803	MT			
			39106-2G813	AT	Yes (SSB)	LDC4RS0A LDC4RT0A LDC4RT0B	LDC4RT1B
		SULEV	39106-2G823	AT	No (key)	LDS4MS0A LDS4MT0A LDS4MT0B	LDS4MT1B
			39106-2G883	AT	Yes (SSB)	LDS4RS0A LDS4RT0A LDS4RT0B	LDS4RT1B

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.
- 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.

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**.
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, "ROM ID Information".

Special Instruction for 2013MY vehicle only:

- If a 2013MY vehicle produces the message "**This ECU upgrade event does not apply to this ECU**" then you will need to go to **GDS MANUAL MODE ECM UPDATE PROCEDURE** to perform this ECM Update.
5. Select update Event 317: "LM 2.4 MPI P030X DTC LOGIC IMPROVEMENT". 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. Perform **ETC initialization** as per the following:
 - Turn **ON ignition for 5 seconds** with engine not running.
 - Turn **OFF ignition for 10 seconds**.

NOTE: Failure to perform ETC initialization may result in DTC P0368 setting.

12. Start the engine to confirm proper operation.

GDS MANUAL MODE ECM UPDATE PROCEDURE**★ IMPORTANT NOTE**

- GDS Manual Mode is intended for recovery of an ECM Update should it begin but then later fail in process in the Auto Mode, or if a 2013MY vehicle had error message “This ECU upgrade event does not apply to this ECU”.
- If the Auto Mode Update had failed then the ECM connectors must be disconnected for 15 minutes to reset its contents before performing this Manual Mode Update.
- It is critical to identify the correct ECM Part Number and PASSWORD selection or the ECM may be permanently damaged. If you are not sure it is recommended to remove ECM and read part number from its label.

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 as per the **GDS Event List of page-1**, then select **Upgrade**.
6. Be certain to carefully make the appropriate vehicle ECM **MENU** selection and **PASSWORD** selection from the table below based on the following vehicle characteristics:

- Model Year of Vehicle:
 - **12MY** [C] in the 10th digit of the VIN
 - **13MY** [D] in the 10th digit of the VIN
- Emissions Certification from the underhood label:
 - **SULEV** (PZEV)
 - **ULEV**
- Immobilizer type:
 - **IMMO** (Start/Stop Button vehicle)
 - **NON IMMO** (Key Start vehicle)

and then select **OK**.

MENU	PASSWORD
12MY LM 2.4 ULEV NON IMMO : 39106/39116-2G802	2802
12MY LM 2.4 SULEV NON IMMO : 39106-2G822	2822
13MY LM 2.4 ULEV NON IMMO : 39106/39116-2G803	2803
13MY LM 2.4 ULEV IMMO : 39106/39116-2G813	2813
13MY LM 2.4 SULEV NON IMMO : 39106-2G823	2823
13MY LM 2.4 SULEV IMMO : 39106-2G883	2883

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