



KIA MOTORS

GROUP
Engine

MODEL
2008 Rio / Rio5 (JB)

NUMBER
066

DATE
April 2010

TECHNICAL SERVICE BULLETIN

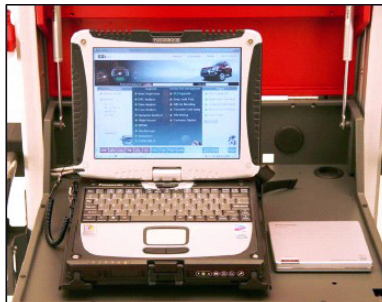
SUBJECT: COMBINED TSB/SERVICE ACTION: ECM UPGRADE FOR MULTIPLE DTC'S LISTED P0300, P0128, P0140, P0442, P0451, P0461(SA 036)

This bulletin provides the procedure to upgrade the Engine Control Module (ECM) of some 2008 RIO/RIO5 (JB) 1.6L vehicles produced June 12, 2007 to June 30, 2008 (MAP sensor vehicles only) which may experience a rough idle during initial cold start-up period and/or illuminate the MIL with DTC's below. The ECM update addresses engine roughness/misfire that may occur in the first minute of idle after cold start with coolant temperature ranging from 30-70° F and other indicated upgrades referenced below. If the engine misfire continues beyond this period refer to service manual diagnostic procedures involving engine mechanical and engine control hardware issues. For confirmation that the latest reflash has been done to a vehicle you are working on, verify ROM ID using the tables in this TSB.

To improve customer satisfaction, Kia is requesting the completion of this Service Action on all affected 2008 Rio/Rio5 (JB) vehicles.

For vehicles not on the VIN list (Not Completed VIN report), but with a customer complaint; perform the following procedure outlined in this bulletin and submit a warranty claim per "customer concern" (Standard TSB) claim information on page 5.

- **P0300:** Random/multiple Cylinder Misfire Detected and/or rough idle state
- **P0128:** Thermostat Monitoring
- **P0140:** O2 Sensor Circuit No Activity Detected (Bank 1 Sensor 2, stored in memory)
- **P0442:** Evaporative Emission System - Leak detected
- **P0451:** Evaporative Emission System Pressure Sensor/Switch Range Performance
- **P0461 or P0422:** Fuel Level Sensor "A" Circuit Range/Performance



Global Diagnostic System (GDS)

To correct this condition, the ECM should be reprogrammed using the GDS download as described in this bulletin.

File Under: Engine

Circulate To: General Manager Service Manager Parts Manager
 Service Advisor(s) Technician(s) Body Shop Manager Fleet Repair

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UPGRADE EVENT NAME

121. 08MY JB 1.6L ECM Update - USA

***NOTICE**

Do NOT replace engine control parts related to misfire such as ignition coil, spark plug and oxygen sensor unless it can be proven the part is defective.

***NOTICE**

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer request to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on WebDCS (Service>Warranty Coverage>Warranty Coverage Inquiry>Campaign Information). Not Completed Recall/Service Action reports are available on WebDCS (Consumer Affairs>Not Completed Recall Recall VIN>Select Report), which includes a list of affected vehicles.

The issue number is SA 036.

***NOTICE**

- A fully charged battery is necessary before ECU upgrade can take place. DO NOT connect a battery charger to the vehicle during ECU upgrade. Make sure the blower motor is 'OFF' during ECU upgrade.
- All ECU upgrades must be done with the ignition key in the 'ON' position.
- Be careful not to disconnect any cables connected to the vehicle or GDS during the ECU upgrade procedure.
- DO NOT start the engine during ECU upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- When the ECU upgrade is completed, turn the ignition key 'OFF' and wait 20 seconds before starting the engine.
- ONLY use approved ECU upgrade software designated for the correct model, year and engine size. Failure to do so may create other driveability issues due to the use of the incorrect ECM/PCM calibration.

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ECM ROM Table Information:

MODEL YEAR	Trans Type	IMMO	ECM P/N	ROM ID	
				PREVIOUS	NEW
08MY	M/T	No (-)	39110 26BG1	GJB-8N6CES0-5000 GJB-8N6CES1-5000 GJB-8N6CES2-5000 GJB-8N6CES3-5000 GJB-8N6CES4-5000 GJB-8N6CEST-5000	GJB-8N6CES5-5000
	A/T		39110-26BG6	GJB-8N6CPS0-A000 GJB-8N6CPS1-A000 GJB-8N6CPS2-A000 GJB-8N6CPS3-A000 GJB-8N6CPS4-A000 GJB-8N6CPST-A000	GJB-8N6CPS5-A000

1. Connect the power supply cable to the GDS tool.

***NOTICE**

If attempting to perform the ECU upgrade with the power supply cable disconnected from the GDS tool, be sure to check that the GDS tool is fully charged before ECU upgrade. If the GDS tool is not fully charged, failure to perform the ECU upgrade may occur. Therefore, it is strongly recommended that the power supply connector be connected to the GDS tool.

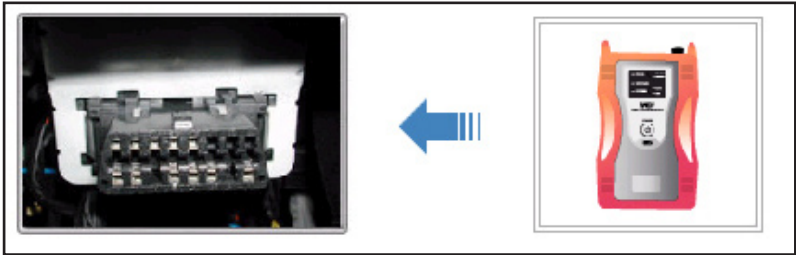
2. Connect the USB cable between the VCI and the GDS tool.

***NOTICE**

When performing the ECU upgrade using the GDS tool, wireless communication between the VCI and GDS tool is not available. Therefore, be sure to connect the USB cable between the VCI and the GDS tool.

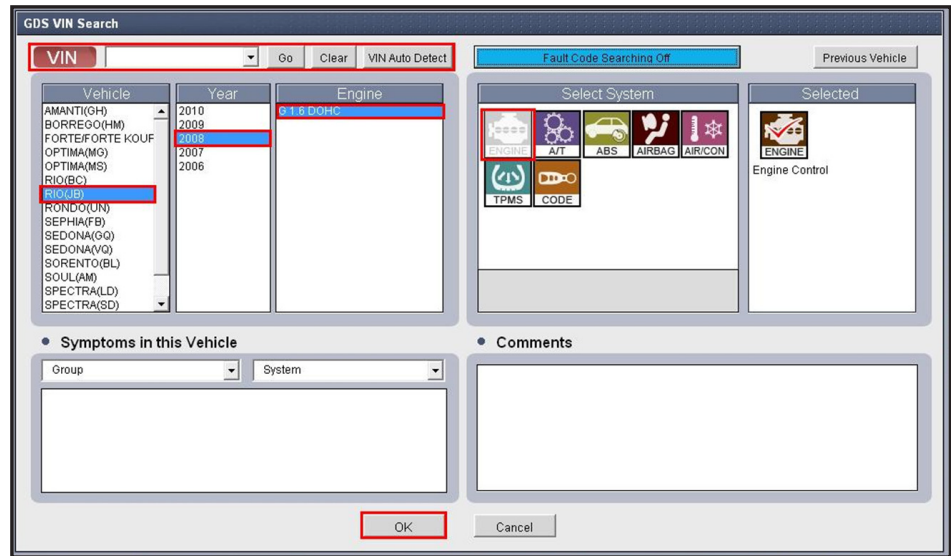
3. Connect the Main 16-pin DLC cable (GHDM – 241000) to the VCI.

4. Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



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- With the ignition key ON, turn ON the VCI and GDS tool. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the VIN AUTO DETECT Function.



***NOTICE**

Global Diagnostic System (GDS) users should access the "Notice" function from the GDS Main Screen for instructions regarding ECM upgrade events.

- Once back at the GDS Main Screen, select ECU Upgrade from the bottom right-hand corner. Next select **Auto Mode**, and then Engine. Perform the ECU upgrade in accordance with normal GDS tool ECU upgrade procedures.

***NOTICE**

Do NOT attempt to perform a Manual Mode upgrade unless Auto Mode fails. Always follow the instructions given on the GDS tool in either Auto or Manual mode. See table for Manual Mode passwords.

MANUAL MODE ECM UPGRADE PASSWORDS:

MENU	PASSWORD	Communication Type
JB 1.6 MT : 39110-26BG1 - 08MY	0261	CAN-Line
JB 1.6 AT : 39110-26BG6 - 08MY	0266	

* Do NOT perform Manual Mode ECM upgrade unless Auto Mode fails.

* Do NOT Force the Calibration into the Incorrect P/N PCM, this is subject to warranty chargeback.

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7. When the GDS tool reports that the ECU upgrade has been successfully completed, click OK, turn OFF the ignition key, and wait at least 10 seconds before attempting to start the engine.
8. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored **due to CAN Line communication during reprogramming.**

AFFECTED PRODUCTION RANGE:

Model	Production Date Range
2008 Rio / Rio5 with 1.6L engine	June 12, 2007 to June 30, 2008

SERVICE ACTION WARRANTY CLAIM INFORMATION:

The affected Service Action vehicles are listed on the "Not Completed Recall VIN Report".

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty
V	39110 26BG6	0	N69	C40	(SA 036) ECM Upgrade – CAN-line	100014R0	0.2 M/H	N/A	0

Note: Only one Labor Op can be claimed.

STANDARD TSB WARRANTY CLAIM INFORMATION:

Use this information only to file a warranty claim for vehicles for which:

1. A customer complains of the same concern.
2. The VIN does not appear on the "affected vehicles" list for Service Action SA 036.
3. The vehicle model year and production date range are identified in this bulletin.

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Replacement Part No.	Qty
W	39110 26BG6	0	N69	C40	(TSB 066) ECM Upgrade – CAN-line	39110F92	0.2 M/H	N/A	0

Note: Only one Labor Op can be claimed.

*NOTICE

VIN Inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA 036 when accessing their Dealer Communications System (DCS).