



GROUP  
ENG

MODEL  
2015MY Rio (UB)  
w/1.6L GDI

NUMBER  
145 (REV 1, 12/15/2014)

DATE  
December 2014

## TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: ECM UPGRADE – MIL ON WITHOUT  
DTC CODE (SA 175)

### \* NOTICE

This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.

This bulletin provides information related to an ECM software upgrade for 2015MY Rio (UB) vehicles with 1.6L GDI engine and produced from May 21, 2014 through September 18, 2014, which may experience a malfunction indicator lamp (MIL) illuminated without any accompanying DTC(s) stored in memory. To prevent and/or correct this condition, the ECM should be reprogrammed using the GDS download, as described in this bulletin. Kia is requesting the completion of this Service Action on all affected vehicles, including dealer stock, prior to delivery. 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.

### \* NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting 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.

This issue number is SA175.

File Under: <ENGINE>

Circulate To:  General Manager  Service Manager  Parts Manager

Service Advisor(s)  Technician(s)  Body Shop Manager  Fleet Repair

**SUBJECT: SERVICE ACTION: ECM UPGRADE – MIL ON WITHOUT  
DTC CODE (SA 175)****ECM Upgrade Procedure:**


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

UPGRADE EVENT NAME
234.UB 1.6GDI THERMOSTAT DTC (P0128) ERROR.

**\* NOTICE**

- A fully charged battery is necessary before ECM upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECM mode during charging. **DO NOT** connect any other battery charger to the vehicle during ECM upgrade.
- All ECM 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 ECM upgrade procedure.
- **DO NOT** start the engine during ECM upgrade.
- **DO NOT** turn the ignition key 'OFF' or interrupt the power supply during ECM upgrade.
- When the ECM upgrade is completed, turn the ignition 'OFF' and wait 10 seconds before starting the engine.
- **ONLY** use approved ECM upgrade software designated for the correct model, year.

**CAUTION**

Before attempting an ECM upgrade on any Kia model, make sure to first determine whether the particular model is equipped with an immobilizer security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback. 

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**ROM ID INFORMATION TABLES :**

**Upgrade event #234 (UB)**

MODEL	T/M	ISG	IMMO	ECM P/N	ROM ID	
					PREVIOUS	NEW
UB 1.6 15MY	A/T	Yes (+)	Yes (+)	39110-2BDT2	GGUB-FNU6PS00C00	<b>GGUB-FNU6PS01C00</b>
			No (-)	39110-2BDT3	GGUB-FNU6QS00C00	<b>GGUB-FNU6QS01C00</b>
		No (-)	Yes (+)	39110-2BDT4	GIUB-FNU6PS00C00	<b>GIUB-FNU6PS01C00</b>
			No (-)	39110-2BDT5	GIUB-FNU6QS00C00	<b>GIUB-FNU6QS01C00</b>
	M/T	No (-)	No (-)	39110-2BDT0	GGUB-FNU6ES01600	<b>GGUB-FNU6ES02600</b>
			Yes (+)	39110-2BDT1	GGUB-FNU6FS01600	<b>GGUB-FNU6FS02600</b>

**To verify the vehicle is affected, be sure to check the Calibration Identification of the vehicle's ECM ROM ID and reference the Information Table as necessary.**

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

**\* NOTICE**

**If attempting to perform the ECM upgrade with the power supply cable disconnected from the GDS tool, be sure to check that the GDS tool is fully charged before ECM upgrade. If the GDS tool is not fully charged, failure to perform the ECM 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.

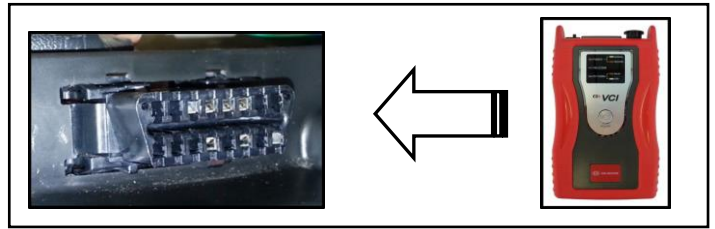
**\* NOTICE**

**When performing the ECM 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.**

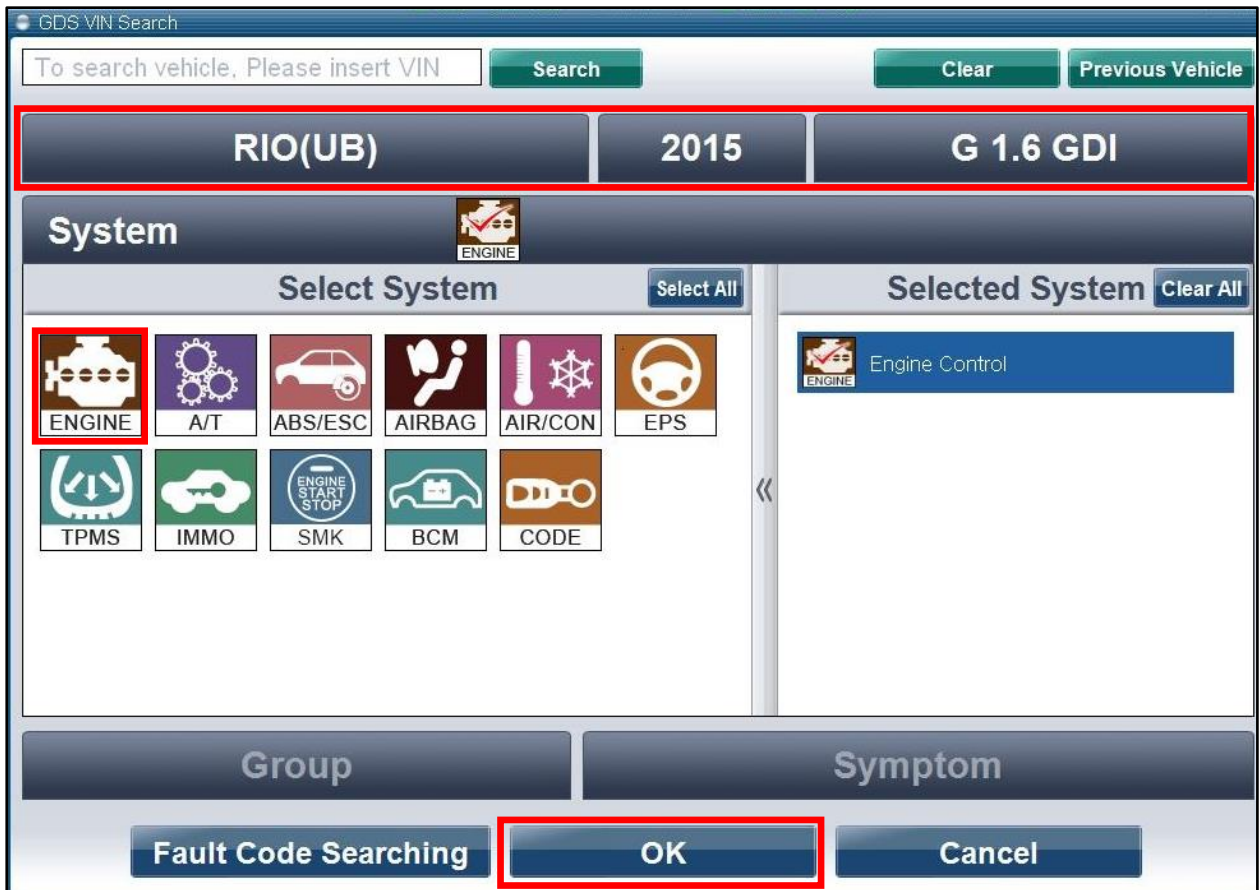
3. Connect the Main 16-pin DLC cable (GHDM – 241000) to the VCI.

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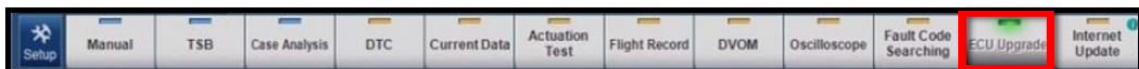
4. Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



5. With the ignition key ON, turn ON the VCI and GDS. Access the GDS vehicle identification number (VIN) screen and configure the vehicle using the **VIN AUTO DETECT** Function.
6. Select **ENGINE** system and click **OK**.



7. Select **ECU Upgrade** from the bottom right-hand corner. Next select **Auto Mode**, and then **Engine**. Perform the ECM upgrade in accordance with normal GDS ECM upgrade procedures.



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8. When the GDS tool reports that the ECM upgrade has been successfully completed, click **OK**, turn OFF the ignition key, and wait at least 10 seconds before attempting to start the engine.
9. Check if any incidental Diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
10. Start the engine to confirm proper operation of the vehicle.

**⚠ CAUTION**

Before attempting an ECM upgrade on any Kia model, make sure to first determine whether the particular model is equipped with an immobilizer security system. Failure to follow proper procedures may cause the PCM to become inoperative after the upgrade and any claims associated with this repair may be subject to chargeback. 🚫

**\* 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:**

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

**Upgrade event #234 Rio (UB)**

MY	MENU	PASSWORD
UB 1.6 15MY	UB 1.6GDI AT -ISG -IMMO : 39110-2BDT2	1022
	UB 1.6GDI AT -ISG +IMMO/SMK : 39110-2BDT3 🚫	1023
	UB 1.6GDI AT +ISG -IMMO : 39110-2BDT4	1024
	UB 1.6GDI AT +ISG +IMMO/SMK : 39110-2BDT5 🚫	1025
	UB 1.6GDI MT -ISG -IMMO : 39110-2BDT0	1020
	UB 1.6GDI MT -ISG +IMMO/SMK : 39110-2BDT1 🚫	1021

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1. Within the **ECM Upgrade** screen, select **Manual Mode** in the left column, select **Engine** and then select **Upgrade Event 234**. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 3 and click **OK**.
2. Enter the appropriate password from the table on Page 5, and click **OK**.
3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
4. Following the guidelines displayed on the screen during upgrade procedure, cycle the ignition **OFF ↔ ON** for ten (10) seconds.
5. Check if any incidental Diagnostic Trouble Codes DTC(s) have been created by the upgrade process; clear any DTC(s) that may be present.
6. Start the engine to confirm proper operation of the vehicle.

AFFECTED VEHICLE PRODUCTION RANGE:

Model	MY	Production Date Range
Rio (UB)	2015	From May 21, 2014 through September 18, 2014

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty
V	39110 2BDT0	0	N99	C99	(SA 175) ECM Upgrade	140072R0	0.3 M/H	N/A	0

**\* NOTICE**

**VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA175 when accessing the WebDCS system.**