

NUMBER 150	DATE July 2015
ENG	2014MY Rio (UB) w/1.6 GDi 2014MY Soul (PS) w/1.6 GDi
GROUP	MODEL

TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: MIL ON WITH DTC(S) P0326/P0441 (SA194)

This bulletin provides information related to the ECM software upgrade of some 2014MY Rio (UB), produced from October 01, 2013 through January 22, 2014, and some 2014MY Soul (PS) vehicles, produced from August 26, 2013 through January 24, 2014, which may experience a malfunction indicator lamp (MIL) illuminated with the Electronic Control Module (ECM) system-related DTCs; P0326, P0441. To correct this condition, the ECM should be reprogrammed using the GDS/KDS download, as described in this bulletin. 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.

P0326: Knock Sensor 1 Circuit Range/ Performance (Bank 1) **P0441:** Evaporative Emission System Incorrect Purge Flow



Global Diagnostic System (GDS)

* 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 <u>SA194</u>.

File Under: <Engine>

Circulate To:

General Manager

Service Manager

Parts Manager

* NOTICE

DO <u>NOT</u> replace any parts related to the DTCs mentioned above unless proven to be the cause after the DTC reflash has been performed. First perform the reflash as described in this bulletin, and verify that no DTC(s) will re-set. Should a DTC reset after the reflash, diagnose according to KGIS. Parts replacement in conjunction with this TSB may be subject to Mandatory Parts Return and returned parts will be tested by KMA. Unnecessarily replaced parts will be subject to charge-back.

ECM Upgrade Procedure:

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

UPGRADE EVENT NAME
238.UB 1.6GDI KNOCKING IMPROVEMENT
255.PS 1.6GDI KNOCKING IMPROVEMENT

* 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.

A 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.

ROM ID INFORMATION TABLES:

Upgrade event #238 (UB)

MODEL	T/1.4	100		MO FOURM	RC	M ID
MODEL	T/M	ISG	IMMO	ECU P/N	PREVIOUS	NEW
UB 1.6GDI	M/T	No (-)	No (-)	39110 2BDL0 39110 2BDN0 39110 2BDR0	GGUB-BNU6ES00600 GGUB-BNU6ES01600 GGUB-BNU6ES02600 GGUB-BNU6ES03600 GGUB-BNU6ES0060A GGUB-BNU6ES016A0 GGUB-DNU6ES01600 GGUB-DNU6ES02600 GGUB-DNU6ES03600 GGUB-DNU6ES04600 GGUB-DNU6ES05600 GGUB-DNU6ES05600 GGUB-DNU6ES05600 GGUB-DNU6ES06600 GGUB-DNU6ES01600	GGUB-ENU6EF01600
		No (-)	Yes (+)	39110 2BDM0 39110 2BDP0 39110 2BDS0	GGUB-BNU6FS00600 GGUB-BNU6FS01600 GGUB-BNU6FS02600 GGUB-BNU6FS03600 GGUB-BNU6FS0060A GGUB-BNU6FS016A0 GGUB-DNU6FS01600 GGUB-DNU6FS02600 GGUB-DNU6FS03600 GGUB-DNU6FS03600 GGUB-DNU6FS04600 GGUB-DNU6FS05600 GGUB-DNU6FS05600 GGUB-DNU6FS05600	GGUB-ENU6FF01600
	A/T	No (-)	No (-)	39110 2BDL5 39110 2BDA7 39110 2BDR5	GGUB-BNU6PS00C00 GGUB-BNU6PS01C00 GGUB-BNU6PS02C00 GGUB-BNU6PS03C00 GGUB-BNU6PS04C00 GGUB-BNU6PS00C0A GGUB-BNU6PS01CA0 GGUB-DNU6PS01C00 GGUB-DNU6PS01C00 GGUB-DNU6PS02C00 GGUB-DNU6PS03C00 GGUB-DNU6PS03C00 GGUB-DNU6PS04C00 GGUB-DNU6PS05C00 GGUB-DNU6PS05C00 GGUB-DNU6PS06C00 GGUB-ENU6PS01C00	GGUB-ENU6PF01C00
		No (-)	Yes (+)	39110 2BDM5 39110 2BDB7 39110 2BDS5	GGUB-BNU6QS00C00 GGUB-BNU6QS01C00 GGUB-BNU6QS02C00 GGUB-BNU6QS03C00 GGUB-BNU6QS04C00 GGUB-BNU6QS00C0A GGUB-BNU6QS01CA0 GGUB-DNU6QS00C00 GGUB-DNU6QS01C00 GGUB-DNU6QS02C00 GGUB-DNU6QS03C00 GGUB-DNU6QS03C00 GGUB-DNU6QS04C00 GGUB-DNU6QS05C00 GGUB-DNU6QS05C00 GGUB-DNU6QS06C00 GGUB-DNU6QS01C00	GGUB-ENU6QF01C00

Upgrade event #238 (UB) (cont.)

MODEL		100		50M B/N		ROM ID
MODEL	TM	ISG	IMMO	ECM P/N	PREVIOUS	NEW
UB 1.6 GDI A/T	Yes (+)	No (-)	39110 2BDL8 39110 2BDC7 39110 2BDR6	GIUB-BNU6PS00C00 GIUB-BNU6PS01C00 GIUB-BNU6PS02C00 GIUB-BNU6PS03C00 GIUB-BNU6PS04C00 GIUB-BNU6PS00C0A GIUB-BNU6PS01CA0 GIUB-BNU6PS01CA0 GIUB-DNU6PS01C00 GIUB-DNU6PS01C00 GIUB-DNU6PS03C00 GIUB-DNU6PS03C00 GIUB-DNU6PS04C00 GIUB-DNU6PS05C00 GIUB-DNU6PS05C00 GIUB-DNU6PS07C00 GIUB-DNU6PS07C00 GIUB-DNU6PS08C00 GIUB-DNU6PS08C00 GIUB-ENU6PS01C00	GIUB-ENU6PF01C00	
	Yes (+)	Yes (+)	39110 2BDM8 39110 2BDD7 39110 2BDS6	GIUB-BNU6QS00C00 GIUB-BNU6QS01C00 GIUB-BNU6QS02C00 GIUB-BNU6QS03C00 GIUB-BNU6QS04C00 GIUB-BNU6QS01CA0 GIUB-BNU6QS01CA0 GIUB-BNU6QS01CA0 GIUB-DNU6QS01C00 GIUB-DNU6QS01C00 GIUB-DNU6QS01C00 GIUB-DNU6QS03C00 GIUB-DNU6QS03C00 GIUB-DNU6QS05C00 GIUB-DNU6QS05C00 GIUB-DNU6QS07C00 GIUB-DNU6QS07C00 GIUB-DNU6QS07C00 GIUB-DNU6QS08C00 GIUB-DNU6QS08C00	GIUB-ENU6QF01C00	
	Yes (+)	No (-)	39110 2BDE7	GIUB-DNU6PSG0C00 GIUB-DNU6PSG1C00 GIUB-DNU6PSG2C00 GIUB-DNU6PSG3C00 GIUB-DNU6PSG4C00 GIUB-DNU6PSG5C00 GIUB-DNU6PSG6C00 GIUB-DNU6PSG7C00 GIUB-DNU6PSG8C00	GIUB-DNU6PFG9C00	
		Yes (+)	Yes (+)	39110 2BDF7	GIUB-DNU6QSG0C00 GIUB-DNU6QSG1C00 GIUB-DNU6QSG2C00 GIUB-DNU6QSG3C00 GIUB-DNU6QSG4C00 GIUB-DNU6QSG5C00 GIUB-DNU6QSG6C00 GIUB-DNU6QSG7C00 GIUB-DNU6QSG8C00	GIUB-DNU6QFG9C00

Upgrade event #255 (PS)

MODEL	MODEL TM ISG IMMO	IMMO	ECU P/NO	ROM ID			
WODEL		ECO P/NO	PREVIOUS	NEW			
		No (-)	Yes (+)	39110 2BSG0	GGPS DNU6FS00600 GGPS DNU6FS01600	GGPS DNU6FF01600	
PS		39110 2BSH0	GGPS DNU6ES00600 GGPS DNU6ES01600	GGPS DNU6EF01600			
1.6GDI		No (-)		39110 2BSG5	GGPS DNU6QS00C00 GGPS DNU6QS01C00	GGPS DNU6QF01C00	
		No (-)	No (-)	39110 2BSH5	GGPS DNU6PS00C00 GGPS DNU6PS01C00	GGPS DNU6PF01C00	

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.

* NOTICE

If performing this TSB using KDS, refer to TSB SST 037 for detailed information.

1. Connect the power supply cable to the GDS.

* NOTICE

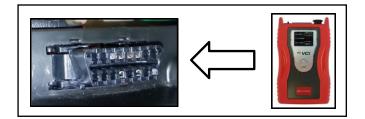
If attempting to perform the ECM upgrade with the power supply cable disconnected from the GDS, be sure to check that the GDS is fully charged before ECM upgrade. If the GDS is not fully charged, failure to perform the ECM upgrade may occur. Therefore, it is strongly recommended that the power supply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

Connect the USB cable between the VCI and the GDS.

* NOTICE

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

- 3. Connect the Main 16-pin DLC cable (GHDM 241000) to the VCI.
- 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.
- Select ENGINE system and click OK.



Display screen above is for demonstration only purposes and will vary depending on model.

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.





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 in either Auto or Manual mode. See table for Manual Mode passwords.

* MANUAL MODE ECM UPGRADE PASSWORDS:

Upgrade event #238 Rio (UB)

MY	MENU	PASSWORD
	UB 1.6GDI MT -ISG -IMMO : 39110 2BDL0/N0	1020
	UB 1.6GDI MT -ISG +IMMO/SMK : 39110 2BDM0/P0	1021
	UB 1.6GDI AT -ISG -IMMO : 39110 2BDL5/A7	1027
UB	UB 1.6GDI AT -ISG +IMMO/SMK : 39110 2BDM5/B7	1028
1.6GDI	UB 1.6GDI AT +ISG -IMMO : 39110 2BDL8/C7	1029
	UB 1.6GDI AT +ISG +IMMO/SMK : 39110 2BDM8/D7	1030
	UB 1.6GDI AT +ISG -IMMO : 39110 2BDE7	1031
	UB 1.6GDI AT +ISG +IMMO/SMK : 39110 2BDF7	1032

Upgrade event #255 Soul (PS)

MODEL	MENU	PASSWORD
PS 1.6GDI	PS 14MY MT -ISG -IMMO : 39110 2BSH0	1020
	PS 14MY MT -ISG +IMMO/SMK : 39110 2BSG0	1021
	PS 14MY AT -ISG -IMMO : 39110 2BSH5	1025
	PS 14MY AT -ISG +IMMO/SMK : 39110 2BSG5	1026

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

- 1. Within the ECM Upgrade screen, select **Manual Mode** in the left column, select **Engine** and then select **Upgrade Event #238 or Upgrade Event #255**. Select the appropriate control unit part number by referring to the ROM ID Information Tables on Pages 3~5, and click **OK**.
- 2. Enter the appropriate password from the tables on Page 7, and click **OK**.
- 3. Upgrade will begin and the progress of the upgrade will appear on the bar graph.
- 4. When the GDS 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.
- 5. Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored such as EPS, ESC, and TPMS that may have been set during reprogramming.
- 6. Start the engine to confirm proper operation of the vehicle.

AFFECTED VEHICLE PRODUCTION RANGE:

Model	MY	DTC	Production Date Range
Rio (UB)	2014	P0326	From October 01, 2013 through January 22, 2014
Soul (PS)	2014	P0441	From August 26, 2013 through January 24, 2014

SERVICE ACTION CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty.
V	39110 2BSH7 (PS)	0	Noo	C00	ECM ———	150051R0	0.3 M/H	N/A	0
	39110 2BDE7 (UB)	U	N99	C99		150051R1			

* NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA194 when accessing the WebDCS system.