



GROUP
Fuel

MODEL
2010-2011MY
Soul (AM) 1.6L

NUMBER
024

DATE
March 2013

TECHNICAL SERVICE BULLETIN

SUBJECT: ECM UPGRADE – KNOCK IMPROVEMENT DTC P0328

This bulletin provides information related to the ECM software upgrade for some 2010-2011MY Soul (AM) 1.6L vehicles which may experience a malfunction indicator lamp (MIL) illuminated with the Electronic Control Module (ECM) system-related DTC P0328. To correct this condition, the ECM should be reprogrammed using the GDS download as described in this bulletin. Before performing this procedure, verify the VIN falls within the production range by consulting the table on page 5. 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.

- **P0328:** Knock Sensor Circuit High



Global Diagnostic System (GDS)

*NOTICE

DO NOT replace any parts related to the DTCs mentioned above unless proven to be the cause for the DTC AFTER the 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 re-set 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 chargeback.

File Under: <Fuel>

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

SUBJECT:

ECM UPGRADE – KNOCK IMPROVEMENT DTC P0328

ECM Upgrade Procedure:


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

UPGRADE EVENT NAME
200.AM 1.6 MPI P0328 KNOCK 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 20 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.

SUBJECT:**ECM UPGRADE – KNOCK IMPROVEMENT DTC P0328****ROM ID Information Tables:****Upgrade event #200 (AM):**

MODEL	MODEL YEAR	IMMO	ECM P/N	ROM ID	
				PREVIOUS	NEW
AM 1.6 MPI 10MY	MT	Yes (+) 	39113-2B040	GAM-9N6CFS0-5000 GAM-9N6CFS1-5000	GAM-9N6CFF0-5000
		No (-)	39113-2B050	GAM-9N6CES0-5000 GAM-9N6CES1-5000	GAM-9N6CEF0-5000
	AT	Yes (+) 	39123-2B060	GAM-9N6CQS0-A000 GAM-9N6CQS1-A000	GAM-9N6CQF0-A000
		Yes (+) 	39123-2B120	GAM-9N6CQS0-AR00 GAM-9N6CQS1-AR00	GAM-9N6CQF0-AR00
		No (-)	39123-2B070	GAM-9N6CPS0-A000 GAM-9N6CPS1-A000	GAM-9N6CPF0-A000
		No (-)	39123-2B130	GAM-9N6CPS0-AR00 GAM-9N6CPS1-AR00	GAM-9N6CPF0-AR00
AM 1.6 MPI 11MY	MT	Yes (+) 	39113-2B042	GAM-BN6CFS0-5000	GAM-BN6CFF0-5000
		No (-)	39113-2B052	GAM-BN6CES0-5000	GAM-BN6CEF0-5000
	AT	Yes (+) 	39123-2B062	GAM-BN6CQS0-A000	GAM-BN6CQF0-A000
		Yes (+) 	39123-2B122	GAM-BN6CQS0-AR00	GAM-BN6CQF0-AR00

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 be connected to the GDS tool.

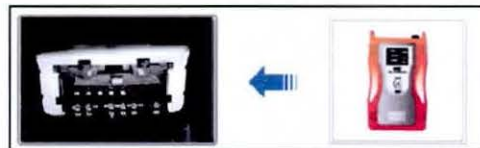
2. Connect the USB cable between the VCI and the GDS tool.

***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.

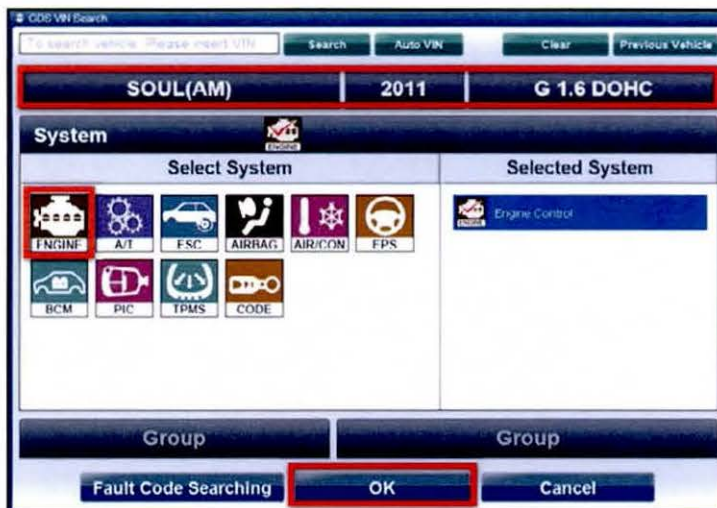
SUBJECT:**ECM UPGRADE – KNOCK IMPROVEMENT DTC P0328**

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.



5. 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.
6. Select **ENGINE** system and click **OK**.

NOTE: Display screen to the right is for demonstrative purposes only and will vary depending on model.



7. 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 ECM upgrade in accordance with normal GDS tool ECM upgrade procedures.









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.

SUBJECT:**ECM UPGRADE – KNOCK IMPROVEMENT DTC P0328****MANUAL MODE ECM UPGRADE PASSWORDS:*****DO NOT perform Manual Mode ECM upgrade unless Auto Mode fails.*****Upgrade event #200 Soul (AM)**

MY	MENU	PASSWORD
10MY	AM 1.6 MT +IMMO : 39113-2B040 	2040
	AM 1.6 MT -IMMO : 39113-2B050	2050
	AM 1.6 AT +IMMO : 39123-2B060 	2060
	AM 1.6 AT +IMMO : 39123-2B120 	2120
	AM 1.6 AT -IMMO : 39123-2B070	2070
	AM 1.6 AT -IMMO : 39123-2B130	2130
11MY	AM 1.6 MT +IMMO : 39113-2B042 	2042
	AM 1.6 MT -IMMO : 39113-2B052	2052
	AM 1.6 AT +IMMO : 39123-2B062 	2062
	AM 1.6 AT +IMMO : 39123-2B122 	2122
	AM 1.6 AT -IMMO : 39123-2B072	2072
	AM 1.6 AT -IMMO : 39123-2B132	2132

- 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.
- Check for Diagnostic Trouble Codes using the GDS and erase any DTCs stored such as EPS, ESC, and TPMS. Due to CAN BUS multiple DTCs may be set during reprogramming.
- Start the engine to confirm proper operation of the vehicle.

AFFECTED VEHICLE PRODUCTION RANGE:

Model	MY	DTC	Production Date Range
Soul (AM)	2010	P0328	All
	2011		

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Op Time	Related Parts	Qty.
W	39123 2B070	0	N96	C40	(FUE 024) ECM Upgrade	39110F6P	0.2 M/H	N/A	0