	GROUP Transmission	MODEL 2012MY Soul (AM)
	NUMBER 050 (REV 1, 10/9/2013)	DATE October 2013
<h2>TECHNICAL SERVICE BULLETIN</h2>		
<b>SUBJECT: TCM UPGRADE - ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT</b>		

**\* 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 a TCM (Transmission Control Module) software upgrade for some A/T equipped 2012MY Soul (AM) 1.6L GDI and 2.0L MPI vehicles. When Active ECO Logic is "ON" a customer may at times notice a slight "shift shudder" feeling when the torque converter damper clutch engages/disengages. To improve Active Eco Control Logic, reprogram the TCM using the GDS 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.



Global Diagnostic System (GDS)

**\* NOTICE**

After performing the software upgrade, make sure to reset the TCM Adaptive Learning Values by referring to TSB TRA 049.

File Under: <Transmission>

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

SUBJECT:

## TCM UPGRADE - ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT

### ECM Upgrade Procedure:

The TCM should be reprogrammed using the GDS  
Download, as described in this bulletin.

UPGRADE EVENT NAME
212.AM 1.6/2.0 ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT-TCM

### \* NOTICE

- A fully charged battery is necessary before ECM/PCM upgrade can take place. It is recommended that the Midtronics GR8-1299 system be used in ECM/PCM mode during charging. DO NOT connect any other battery charger to the vehicle during ECM/PCM upgrade.
- All ECM/PCM 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/PCM upgrade procedure.
- DO NOT start the engine during ECM/PCM upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECM/PCM upgrade.
- When the ECM/PCM upgrade is completed, turn the ignition 'OFF' and wait 20 seconds before starting the engine.
- ONLY use approved ECM/PCM upgrade software designated for the correct model, year.

### ROM ID INFORMATION TABLES:

#### Upgrade Event #212

MODEL	TCM/PCM	ROM ID	
		PREVIOUS	NEW
AM 1.6 GDI (Base)	39110-2BCG3 39110-2BCG3	TAM0Z16NC2 TAM0Z16NC3	TAM0Z16NC4
AM 2.0 MPI (Plus)	39101-2EAJ3 39103-2EAJ3 39103-2EAK3	TAM0C20NCA TAM0C20NC0 TAM0C20NC1	TAM0C20NCB
AM 2.0MPI (Exclaim)	39101-2EAC3 39103-2EAC3	TAM0C20NJ0 TAM0C20NJ1 TAM0C20NJ2	TAM0C20NJ3

*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.*

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TCM UPGRADE - ACTIVE ECO ACCELERATION  
LOGIC IMPROVEMENT

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.

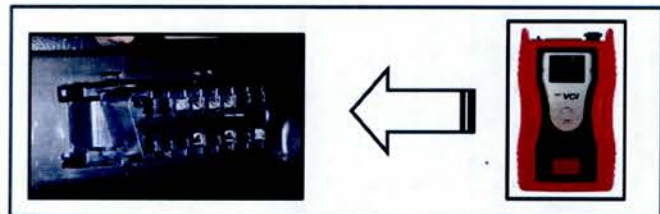
2. Connect the USB cable between the VCI and the GDS tool.

**\* 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.

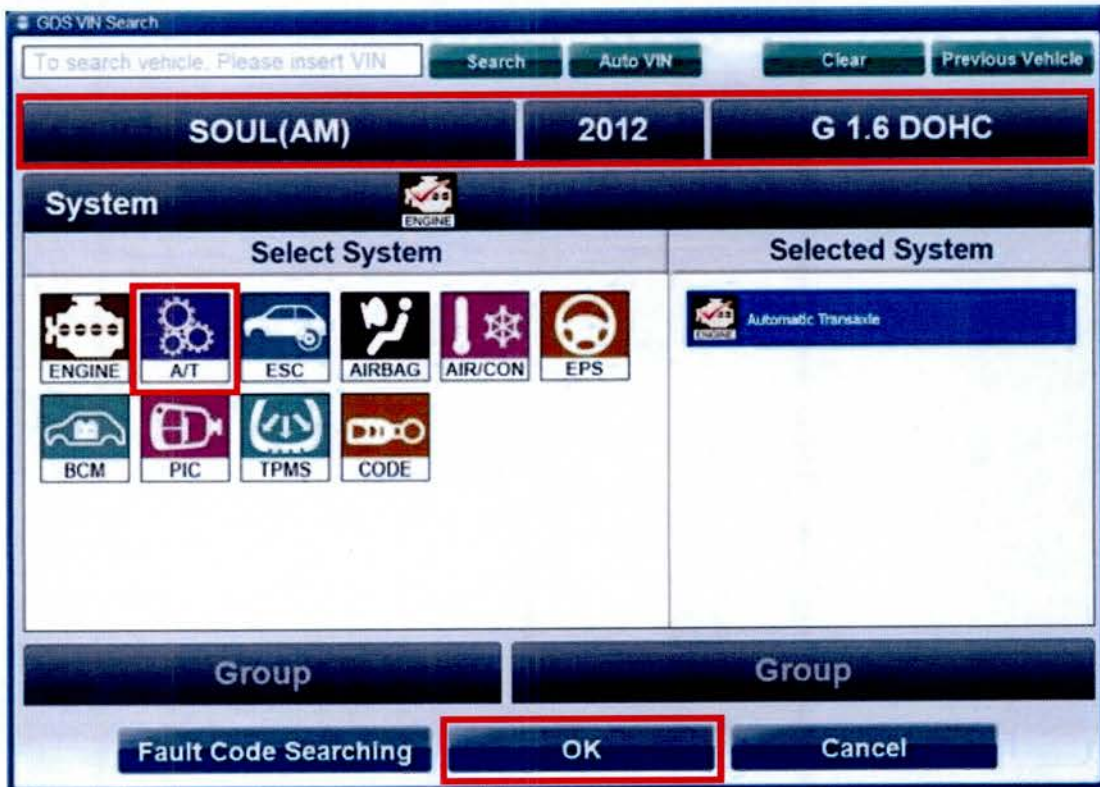
4. Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



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.

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## TCM UPGRADE - ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT



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




7. 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.
8. After the upgrade is complete, reset the TCM Adaptive Learning Values.
9. Start the engine to confirm proper operation of the vehicle.

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## TCM UPGRADE - ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT

### Manual Mode Upgrade

#### 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:

#### Upgrade Event #212 Soul (AM)

MENU	PASSWORD
AM 1.6 GDI : 39110-2BCH3/CG3	1023
AM 2.0 MPI : 39101-2EAJ3/K3, 39103-2EAJ3/K3	0323
AM 2.0 MPI : 39101/03-2EAC3	0324

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 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.
10. After the upgrade is complete, reset the TCM Adaptive Learning Values.
11. Start the engine to confirm proper operation of the vehicle.

**SUBJECT:**

## TCM UPGRADE - ACTIVE ECO ACCELERATION LOGIC IMPROVEMENT

## AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Soul (AM)	2012MY

## STANDARD WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty
W	39101 2EAC3	0	N69	C40	(TRA 050) TCM Upgrade	56300F06	0.3 M/H	N/A	0

<b>* NOTICE</b>
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Use op Code 95440A00 (0.6 M/H) with the TCM reflash operation. Refer to TSB TRA 049 for detailed information.
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