	GROUP FUE	MODEL 2015MY K900 (KH)
	NUMBER 029	DATE October 2015
TECHNICAL SERVICE BULLETIN		
SUBJECT: SERVICE ACTION: REAR OXYGEN (O₂) SENSOR LOGIC IMPROVEMENT (SA199)		

This bulletin provides information related to the ECM software upgrade of some 2015MY K900 (KH) vehicles, produced from December 13, 2013 through December 15, 2014, to improve rear Oxygen (O₂) Sensor logic. To apply the improved logic, 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.



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 SA199.

File Under: <Engine>

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

SUBJECT:

SERVICE ACTION: REAR OXYGEN (O₂) SENSOR LOGIC IMPROVEMENT (SA199)**ECM Upgrade Procedure:**

To apply the improved logic, the ECM should be reprogrammed using the GDS/KDS download, as described in this bulletin.


UPGRADE EVENT NAME

Upgrade Event 261.KH 5.0 GDI IUMPR LOGIC 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.

**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: SERVICE ACTION: REAR OXYGEN (O₂) SENSOR LOGIC IMPROVEMENT (SA199)

ROM ID INFORMATION TABLES :

Upgrade event #261 K900 (KH)

MODEL	MY	ECM P/NO	ROM ID	
			PREVIOUS	NEW
KH 5.0 GDI	2015	39110 3FKN5	GKH FN0GFS0 F100 GKH FN0GFS1 F100	GKH FN0GFS2 F100

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.

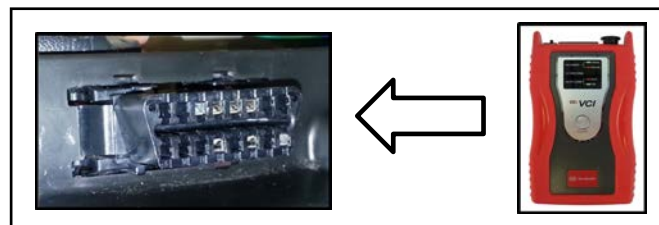
2. Connect the USB cable between the VCI and the GDS.

★ 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.

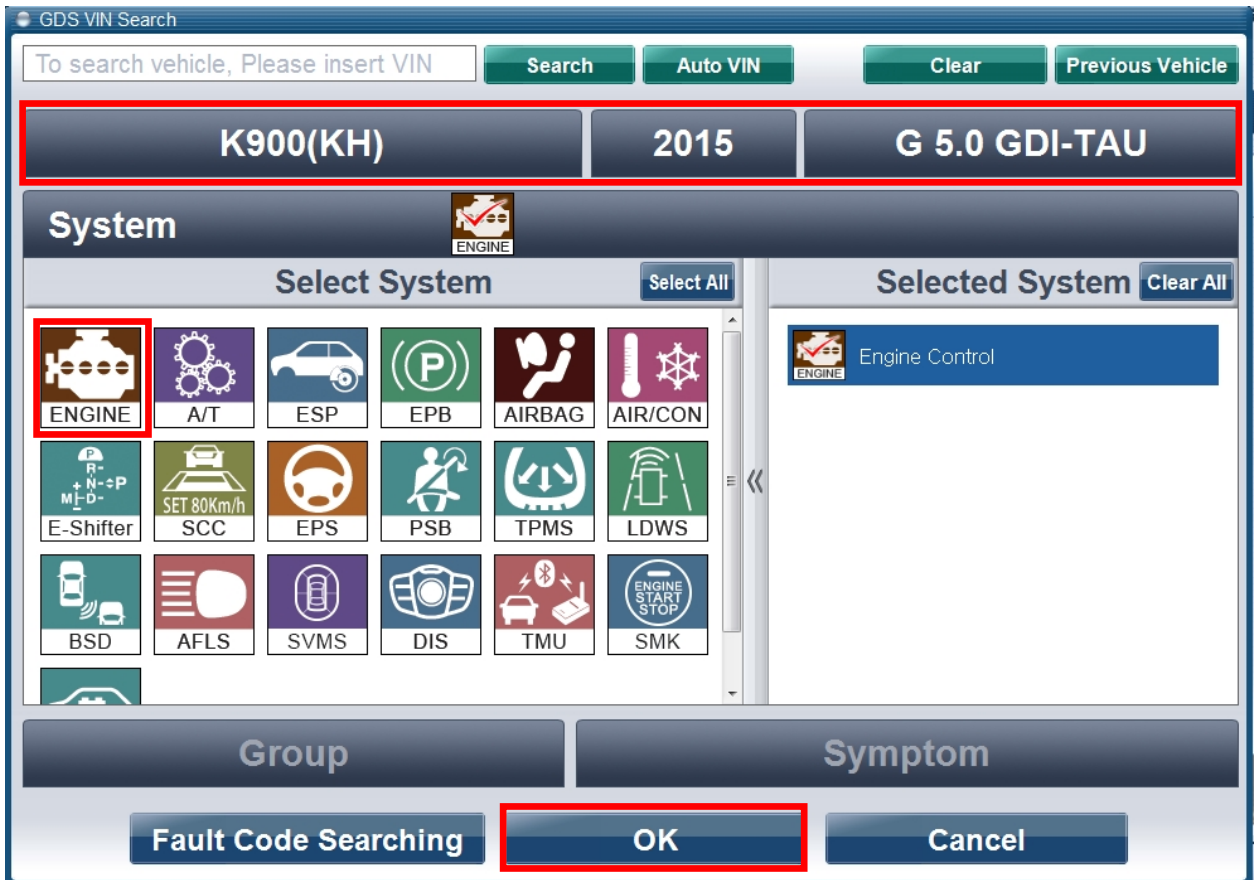
4. Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



SUBJECT:

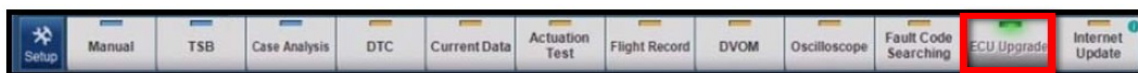
SERVICE ACTION: REAR OXYGEN (O₂) SENSOR LOGIC IMPROVEMENT (SA199)

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**.



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.



SUBJECT: SERVICE ACTION: REAR OXYGEN (O₂) SENSOR LOGIC IMPROVEMENT (SA199)



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 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 #261 K900 (KH)

Model	MENU	PASSWORD
KH (5.0 GDI)	KH 5.0 GDI NAS AT +IMMO/SMK : 39110 3FKN5	1035

1. Within the ECM Upgrade screen, select **Manual Mode** in the left column, select **Engine** and then select **Upgrade Event #261**. Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 3, and click **OK**.
2. Enter the password from the table above 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 that may have been set during reprogramming.
6. Start the engine to confirm proper operation of the vehicle.

SUBJECT:**SERVICE ACTION: REAR OXYGEN (O₂) SENSOR LOGIC IMPROVEMENT (SA199)****AFFECTED VEHICLE PRODUCTION RANGE:**

Model	Production Date Range
K900 (KH)	From December 13, 2013 through December 15, 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 3FKN5	0	N99	C99	(SA 199) ECM Upgrade	150077R0	0.3 M/H	N/A	0

*** NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA199 when accessing the WebDCS system.