



GROUP  
ENG

MODEL  
2015MY K900 (KH)

NUMBER  
141 (REV 1, 04/25/2014)

DATE  
April 2014

## TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: 5.0L (TAU V8) GDI RPM STABILITY  
IMPROVEMENT - ECM UPGRADE (SA165)

### \* 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 inspection of the current ECM ROM ID and, if necessary, an upgrade of the ECM software on some 2015MY K900 vehicles, produced from January 24, 2014 through April 10, 2014, which may not have the latest version ROM ID installed. To correct this condition, verify ROM ID using the tables in this TSB and update the ECM, as necessary. To ensure maximum customer satisfaction, Kia is requesting the completion of this Service Action on all affected 2015MY K900 vehicles.



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 SA165.

File Under: <ENGINE>

Circulate To:  General Manager  Service Manager  Parts Manager

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

SUBJECT:

## SERVICE ACTION: 5.0L (TAU V8) GDI RPM STABILITY IMPROVEMENT - ECM UPGRADE (SA165)

### ECM Upgrade Procedure:

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


UPGRADE EVENT NAME
228.KH 5.0 GDI RPM STABILITY IMPROVEMENT(ECU)

### ★ 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. 

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**ROM ID INFORMATION TABLES :**

**Upgrade event #228 K900 (KH)**

MODEL	T/M	IMMO	ECM P/N	ROM ID	
				PREVIOUS	NEW
K900 (KH) 15MY	A/T	Yes (+) 	39110-3FKN5	GKH-FN0GFS0-F100	GKH-FN0GFS1-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.*

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.

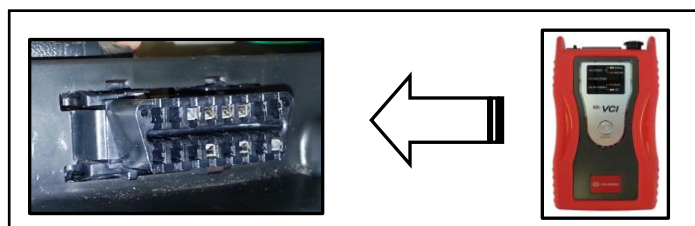
2. Connect the USB cable between the VCI and the GDS.

**\* 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.

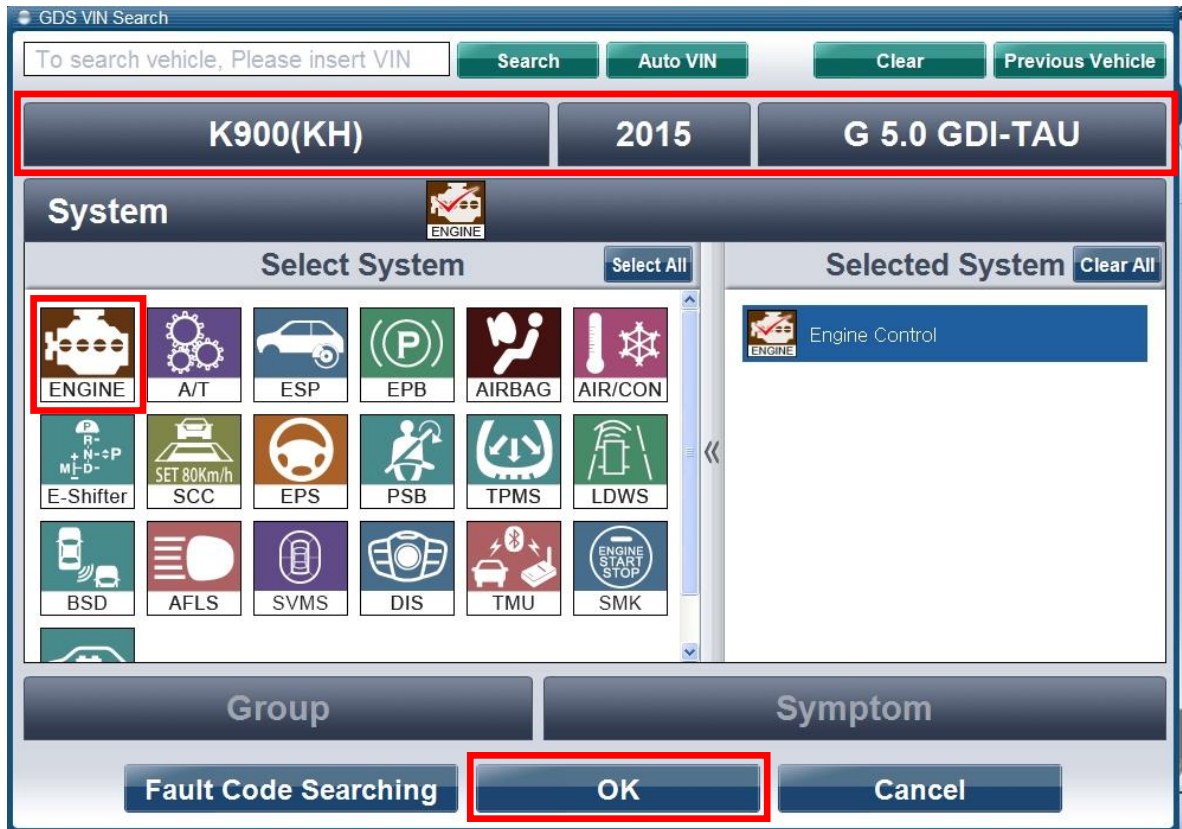
4. Connect the Main 16-pin DLC cable (GHDM – 241000) to the OBD-II connector, located under the driver's side of the instrument panel.



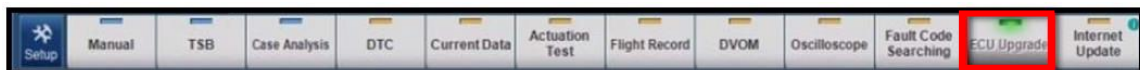
SUBJECT:

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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.



8. 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.
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.

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**⚠ 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 #228 K900 (KH)**

MY	MENU	PASSWORD
K900 (KH) 15MY	KH 5.0 GDI AT ULEV +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 228**. 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 above, 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.

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# SERVICE ACTION: 5.0L (TAU V8) GDI RPM STABILITY IMPROVEMENT - ECM UPGRADE (SA165)

AFFECTED VINS:

## \* NOTICE

**Some VINs in the list below may already have the latest software installed. Always confirm the current vehicle ROM ID and compare it to table on Page 3 to determine if a re-flash is required.**

KNALW4D41F6019496	KNALW4D44F6018522	KNALW4D42F6018227	KNALW4D47F6018000
KNALW4D47F6019406	KNALW4D41F6018526	KNALW4D41F6018090	KNALW4D4XF6017634
KNALW4D49F6019245	KNALW4D47F6018529	KNALW4D40F6018100	KNALW4D48F6017986
KNALW4D49F6019276	KNALW4D46F6018523	KNALW4D46F6018084	KNALW4D46F6017646
KNALW4D47F6018627	KNALW4D49F6018502	KNALW4D49F6018063	KNALW4D47F6018014
KNALW4D40F6018954	KNALW4D48F6018507	KNALW4D46F6018070	KNALW4D43F6018009
KNALW4D46F6018960	KNALW4D44F6018519	KNALW4D42F6017644	KNALW4D41F6018008
KNALW4D43F6018835	KNALW4D43F6018513	KNALW4D40F6018081	KNALW4D4XF6018007
KNALW4D4XF6018959	KNALW4D41F6018509	KNALW4D48F6018071	KNALW4D49F6017978
KNALW4D49F6018838	KNALW4D40F6018503	KNALW4D46F6018067	KNALW4D47F6017994
KNALW4D46F6018828	KNALW4D45F6018528	KNALW4D4XF6018024	KNALW4D42F6017630
KNALW4D40F6018629	KNALW4D49F6018452	KNALW4D48F6018023	KNALW4D42F6017627
KNALW4D42F6018857	KNALW4D43F6018446	KNALW4D47F6018059	KNALW4D41F6017988
KNALW4D49F6018824	KNALW4D49F6018449	KNALW4D46F6018005	KNALW4D47F6017977
KNALW4D44F6018830	KNALW4D48F6018457	KNALW4D42F6018065	KNALW4D49F6017639
KNALW4D40F6018825	KNALW4D41F6018459	KNALW4D40F6018033	KNALW4D4XF6017990
KNALW4D41F6018848	KNALW4D47F6018451	KNALW4D40F6017979	KNALW4D49F6017642
KNALW4D47F6018756	KNALW4D4XF6018461	KNALW4D49F6017995	KNALW4D48F6017972
KNALW4D47F6018742	KNALW4D47F6018448	KNALW4D43F6018026	KNALW4D46F6017968
KNALW4D44F6018777	KNALW4D4XF6018430	KNALW4D42F6018003	KNALW4D46F6017632
KNALW4D46F6018750	KNALW4D43F6018253	KNALW4D4XF6017987	KNALW4D45F6017976
KNALW4D4XF6018766	KNALW4D4XF6018251	KNALW4D47F6018045	KNALW4D45F6017640
KNALW4D4XF6018752	KNALW4D45F6018223	KNALW4D47F6018031	KNALW4D44F6018004
KNALW4D49F6018774	KNALW4D45F6018030	KNALW4D40F6017996	KNALW4D44F6017970
KNALW4D47F6018773	KNALW4D42F6018230	KNALW4D46F6018036	KNALW4D44F6017628
KNALW4D42F6018759	KNALW4D45F6018254	KNALW4D4XF6018055	KNALW4D42F6017966
KNALW4D47F6018630	KNALW4D40F6018260	KNALW4D4XF6018041	KNALW4D41F6017635
KNALW4D48F6018636	KNALW4D48F6018233	KNALW4D4XF6018038	KNALW4D40F6017965
KNALW4D44F6018634	KNALW4D47F6018224	KNALW4D48F6018037	KNALW4D44F6017595
KNALW4D40F6018453	KNALW4D46F6018229	KNALW4D46F6018019	KNALW4D44F6017631
KNALW4D49F6018533	KNALW4D40F6018226	KNALW4D46F6017999	KNALW4D49F6017964
KNALW4D46F6018649	KNALW4D49F6018094	KNALW4D45F6018027	KNALW4D43F6017975
KNALW4D45F6018514	KNALW4D44F6018097	KNALW4D44F6018021	KNALW4D48F6017633
KNALW4D48F6018653	KNALW4D42F6018101	KNALW4D43F6018057	KNALW4D40F6017643
KNALW4D4XF6018637	KNALW4D42F6018096	KNALW4D42F6018034	KNALW4D4XF6017973
KNALW4D4XF6018623	KNALW4D40F6018095	KNALW4D42F6018020	KNALW4D46F6017596
KNALW4D49F6018631	KNALW4D43F6017636	KNALW4D41F6018025	KNALW4D47F6017641
KNALW4D48F6018622	KNALW4D4XF6018072	KNALW4D40F6018002	KNALW4D46F6017629
KNALW4D46F6018635	KNALW4D4XF6018086	KNALW4D43F6017989	KNALW4D45F6017637
KNALW4D45F6018626	KNALW4D49F6018032	KNALW4D46F6017985	KNALW4D45F6017623
KNALW4D41F6018638	KNALW4D48F6018068	KNALW4D41F6018011	KNALW4D44F6017645
KNALW4D40F6018632	KNALW4D44F6018228	KNALW4D40F6017982	KNALW4D43F6017622
KNALW4D42F6018647	KNALW4D43F6018222	KNALW4D44F6017998	KNALW4D42F6017935
KNALW4D47F6018532	KNALW4D43F6018088	KNALW4D43F6017992	KNALW4D42F6017594



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KNALW4D45F6017928	KNALW4D41F6017943	KNALW4D46F6017534	KNALW4D4XF6017469
KNALW4D48F6017941	KNALW4D41F6017604	KNALW4D43F6017524	KNALW4D44F6017483
KNALW4D47F6017591	KNALW4D40F6017951	KNALW4D46F6017520	
KNALW4D45F6017959	KNALW4D46F6017906	KNALW4D4XF6017522	
KNALW4D45F6017587	KNALW4D44F6017905	KNALW4D46F6017548	
KNALW4D49F6017902	KNALW4D42F6017904	KNALW4D45F6017556	
KNALW4D49F6017625	KNALW4D41F6017909	KNALW4D42F6017563	
KNALW4D4XF6017617	KNALW4D4XF6017911	KNALW4D40F6017559	
KNALW4D4XF6017598	KNALW4D4XF6017908	KNALW4D43F6017569	
KNALW4D4XF6017584	KNALW4D48F6017910	KNALW4D42F6017515	
KNALW4D49F6017933	KNALW4D40F6017903	KNALW4D45F6017508	
KNALW4D49F6017592	KNALW4D47F6017901	KNALW4D49F6017527	
KNALW4D47F6017624	KNALW4D40F6017898	KNALW4D47F6017512	
KNALW4D46F6017923	KNALW4D46F6017551	KNALW4D45F6017511	
KNALW4D44F6017922	KNALW4D44F6017564	KNALW4D40F6017528	
KNALW4D43F6017619	KNALW4D44F6017547	KNALW4D43F6017510	
KNALW4D43F6017586	KNALW4D48F6017518	KNALW4D49F6017530	
KNALW4D42F6017577	KNALW4D45F6017525	KNALW4D47F6017526	
KNALW4D40F6017626	KNALW4D41F6017523	KNALW4D47F6017509	
KNALW4D40F6017593	KNALW4D48F6017566	KNALW4D46F6017517	
KNALW4D47F6017588	KNALW4D48F6017535	KNALW4D44F6017516	
KNALW4D4XF6017925	KNALW4D47F6017560	KNALW4D43F6017507	
KNALW4D46F6017937	KNALW4D47F6017557	KNALW4D42F6017532	
KNALW4D45F6017606	KNALW4D44F6017533	KNALW4D42F6017529	
KNALW4D44F6017953	KNALW4D41F6017568	KNALW4D40F6017531	
KNALW4D42F6017949	KNALW4D48F6017552	KNALW4D40F6017514	

AFFECTED VEHICLE PRODUCTION RANGE:

Model	MY	Production Date Range
K900 (KH)	2015	From January 24, 2014 through April 10, 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 3FKN5	0	N99	C40	(ENG 141) ECM ROM ID Inspect	140023I0	0.2 M/H	N/A	0
V	39110 3FKN5	0	N99	C40	(ENG 141) ECM ROM ID Inspect & Reflash	140023R0	0.3 M/H	N/A	0