		GROUP Chassis	MODEL 2014~2015MY Optima (QF)			
		NUMBER 056	DATE April 2015			
TECHNICAL SERVICE BULLETIN						
SUBJECT:	SJECT: SERVICE ACTION: STEERING FEEL IMPROVEMENT (SA188)					

This bulletin provides information related to an upgrade of the logic for the Motor Driven Power Steering (MPDS) ECU of some 2014~2015MY Optima (QF) vehicles, produced from August 23, 2013 through July 24, 2014, to address some complaints that the steering pulls to one side. To install the new steering logic, reprogram the MDPS System 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)



Kia Diagnostic System (KDS)

* 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>SA 188</u>.

File Under: <Chassis>



ECM Upgrade Procedure:

UPGRADE EVENT NAME

249.QF EPS 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 ECU 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 ECU upgrade procedure.
- DO NOT start the engine during ECU upgrade.
- DO NOT turn the ignition key 'OFF' or interrupt the power supply during ECU upgrade.
- When the ECU upgrade is completed, turn the ignition 'OFF' and wait 20 seconds before starting the engine.
- ONLY use approved ECU upgrade software designated for the correct model, year.

ROM ID INFORMATION TABLES:

Upgrade event #249

MODEL	FCU P/NO	ROM ID				
MODEL	2001/10	PREVIOUS	NEW			
	56300 2T305 (w/KEY)					
Optima (QF)	56300 2T325 (w/SMK)	4TFDH309 4TFDJ309	41FDK406			

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.

Page 3 of 8

SUBJECT: SERVICE ACTION: STEERING FEEL IMPROVEMENT (SA188)

1. Connect the power supply cable to the GDS.

***** NOTICE

If attempting to perform the ECU upgrade with the power supply cable disconnected from the GDS, be sure to check that the GDS is fully charged before ECU upgrade. If the GDS is not fully charged, failure to perform the ECU 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.



When performing the ECU 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.



Page 4 of 8

SUBJECT: SERVICE ACTION: STEERING FEEL IMPROVEMENT (SA188)

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.

To search vehicle,	Please insert VIN Searc	h	Clear Previous Vehicle
OPT	IMA(TF/QF)	2015	G 2.0 T-GDI THETA II
System	EPS	_	
	Select System	Select All	Selected System Clear All
ENGINE ATT ATT ATT ATT BSD BSD BSD BCM	ESC AIRBAG AIR/CON AIRBAG AIR/CON AHLS AVN THU	EPS (Kotor Driven Power Steering
	Group	_	Symptom
Fault	Code Searching	ок	Cancel

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

	* Setup	Manual	TSB	Case Analysis	DTC	Current Data	Actuation Test	Flight Record	DVOM	Oscilloscope	Fault Code Searching	ECU Upgrade	Internet Update
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7. After ECU upgrade is complete, perform the MDPS **EPS Type Recognition** procedure on GDS/KDS.



- 8. Select the appropriate EPS default steering mode from the drop down menu according to the vehicle trim level, as shown below. Click **OK** to continue.
 - For LX/EX vehicles, select 'EX Standard'
 - For SX/SXL vehicles, select 'SX Standard'





() VC	I : WLAN On S VMI : Off S Internet : Off VDN : 15	0401004F Dayxes Frid
CD3 Preparation	Diagnosis Vehicle S/W Management R	epair 💿
Venicle D OPTIMA(TF/QF)/2015/G 2.0 T-GDI TH	HETAII System D Steering/Motor Driven Power S	Steering 🚺 🗃
Vehicle S/W M CEPS Type Recognition		
ECU Upgr Audio Upd ID Registe System Ken	[EPS Type Recognition] This function is used for loading accurate EPS type into the EPS recoge	
	Recognition completedff After ignition kay oft, wait for 20 sec. before nead (prilition kay on then press (DK) button.	
Option Treatr	EX STANDARD •	
Data Treatr	OK Cancel	
Inspection / Test		
ECU Mapping Verification		
Selup FeedBack Manual TSB DTG	C Current Data Actuation Test Flight Record e-Report Fault Code Searching	ECU Upgrade Internet Update
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***** 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 #249 (QF)

Model	Menu	Password
Optima (QF)	EPS : 56300 2T305/325	2285

- 1. Within the ECU Upgrade screen, select **Manual Mode** in the left column, select **EPS** system and then select **Upgrade Event 249.QF EPS LOGIC IMPROVEMENT.** Select the appropriate control unit part number by referring to the ROM ID Information Table on Page 2, and click **OK**.
- 2. Enter the appropriate 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 upgrade has been successfully completed, click **OK** and turn the ignition off 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 vehicle to confirm proper operation.

7. After upgrade is complete, perform the MDPS **EPS Type Recognition** procedure on GDS/KDS.



- 8. Select the appropriate EPS default steering mode from the drop down menu according to the vehicle trim level, as shown below. Click **OK** to continue.
 - For LX/EX vehicles, select 'EX Standard'
 - For SX/SXL vehicles, select 'SX Standard'







Page 8 of 8

SUBJECT: SERVICE ACTION: STEERING FEEL IMPROVEMENT (SA188)

AFFECTED VEHICLE PRODUCTION RANGE:

Model	Production Date Range
Optima (QF)	From August 23, 2013 through July 24, 2014

WARRANTY CLAIM INFORMATION:

Claim Type	Causal P/N	Qty.	N Code	C Code	Repair Description	Labor Op Code	Time	Related Parts	Qty.
V	56310 2T305	0	N99	C99	(SA 188) EPS Upgrade	150A08R0	0.3 M/H	N/A	0

***** NOTICE

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SA188 when accessing the WebDCS system.