

GROUP	MODEL
CHA	Multiple Models
NUMBER	DATE
084 (Rev 1, 01/04/2019)	November 2018

# TECHNICAL SERVICE BULLETIN

SUBJECT: REPLACEMENT OF C-MDPS MOTOR AND/OR ECU

## \* 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 regarding the partial repair of the Motor Driven Power Steering (MDPS) Motor and/or Electronic Control Unit (ECU) on the listed Kia models with a column mounted C-MDPS unit. Follow the procedure outlined in this bulletin to replace the <u>C-MDPS Motor and/or ECU</u> per DTC in the order described in the table below.

Prior to proceeding with this bulletin, ensure that all wiring connections have been inspected before replacing any of the parts listed in the table below.

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DTC	DTC Error	Replacement Order			
ыс	DIC EIIO	1st	2nd	3rd	
C2400	Motor Fault Motor Not Running	- Motor	ECU	Steering Column	
C2401	Motor Position Sensor	Motor	200	Assembly	
C1604	ECU Hardware				
C1704	ECU Fail-Safe Relay	ECU	Steering Column	-	
C1705	MDPS Circuit Malfunction	ECU	Assembly		
C2413	Motor Current				
C2412	Motor Short or Open	Motor	ECU	Steering Column Assembly	

Model	Model Year
Optima (TF)	2011 – 2015
Optima (QF)	2012 – 2015
Optima (TF HEV)	2011 – 2016
Sorento (XMa)	2014 – 2015
Optima (JF, JFa)	2016~
Sorento (UMa)	2016~

## \* NOTICE

This bulletin only outlines the replacement procedure of either or both of the Column Mounted (C-MDPS) Motor and the ECU, <u>NOT</u> the replacement of the complete C-MDPS steering column assembly.

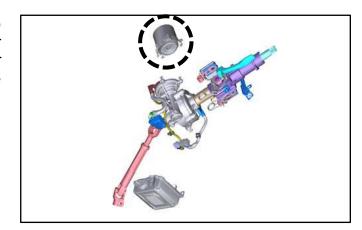
File Under: <Chassis>

☑ Service Advisors ☑ Technicians ☑ Body Shop Manager ☑ Fleet Repair

### REPLACEMENT OF C-MDPS MOTOR AND/OR ECU

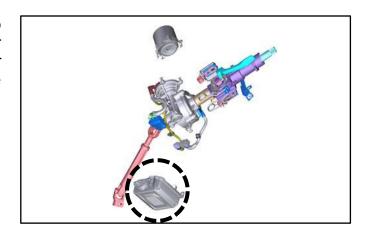
#### **Replacement Procedure for MDPS Motor:**

 Replace the MDPS motor by referring to the "Steering System → Electric Power Steering → MDPS Motor → Repair Procedures" chapter in the applicable Shop Manual on KGIS.



#### **Replacement Procedure for MDPS ECU:**

1 Replace the MDPS ECU by referring to the "Steering System → Electric Power Steering → MDPS <u>ECU</u> → Repair Procedures" chapter in the applicable Shop Manual on KGIS.



## \* IMPORTANT

Ensure all steps are closely followed within the Service information as additional KDS-related procedures are required. Ensure the Steering Angle Sensor (SAS) is calibrated and there are no DTCs after replacement of the MDPS Motor <u>and/or</u> ECU. Verify proper operation of the steering system and vehicle.

# REPLACEMENT OF C-MDPS MOTOR AND/OR ECU

### AFFECTED VEHICLE RANGE:

Model	Model Year Range			
Optima (TF)	2011 through 2015			
Optima (QF)	2012 through 2015			
Optima (TF HEV)	2011 through 2016			
Sorento (XMa) 2014 through 2015				
Optima (JF, JFa) 2016~				
Sorento (UMa)	2016~			

### **REQUIRED PART:**

Part Name	Part Number	Figure
C-MDPS Motor	Refer to EPC	
C-MDPS ECU	Refer to EPC	

#### WARRANTY INFORMATION:

N Code: D61 C Code: ZZ4

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
TF, QF,	W	Refer to EPC	1	C-MDPS Motor Replacement	56330F01	0.8 M/H	N/A	0
TF HEV	VV	Refer to EPC	1	C-MDPS ECU Replacement	56340F01	0.5 M/H	N/A	0
IF IF-	W	Refer to EPC	1	C-MDPS Motor Replacement	56330F01	0.8 M/H	N/A	0
JF, JFa,		Refer to EPC	1	C-MDPS ECU Replacement	56340F01	0.8 M/H	N/A	0
XMa	VM- W	W Refer to EPC	1	C-MDPS Motor Replacement	56330F01	0.8 M/H	N/A	0
Alvia	VV			C-MDPS ECU Replacement	56340F01	0.5 M/H	N/A	0
UMa	W	Refer to EPC	1	C-MDPS Motor Replacement	56330F01	0.7 M/H	N/A	0
Uivia		Refer to EPC	1	C-MDPS ECU Replacement	56340F01	0.7 M/H	N/A	0