

Technical Service Bulletin

GROUP	NUMBER
CAMPAIGN	19-01-031H
DATE	MODEL(S)
OCTOBER 2019	Santa Fe (NC) Veloster (FS) Elantra (MD) Azera (HG)

SUBJECT: STEERING ANGLE SENSOR RESET (SERVICE CAMPAIGN T4A)

***** IMPORTANT

*** Retail Vehicles ***

Dealers must perform this Service Campaign on all affected vehicles whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

Description:

Certain 2017-2018 MY Santa Fe (NC), 2016MY Veloster (FS), 2014MY Elantra (MD), and 2016-2017MY Azera (HG) vehicles may experience a warning lamp being illuminated intermittently when starting the engine after replacing the motor driven power steering (MDPS) column & housing. This bulletin describes the procedure to perform the steering angle sensor (SAS) reset using the GDS.



Applicable Vehicles: Certain 2017-2018MY Santa Fe (NC), 2016MY Veloster (FS), 2014MY Elantra (MD), and 2016-2017MY Azera (HG) vehicles.

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
Santa Fe (NC) Veloster (FS) Elantra (MD) Azera (HG)	90C021R0	Steering Angle Sensor Reset	0.3 M/H	13381- 08003	I3A	ZZ3

NOTE 1: Submit Claim on Campaign Claim Entry Screen

NOTE 2: If a part is found in need of replacement while performing Service Campaign T4A and the affected part is still under warranty, submit a separate claim using the same Repair Order. If the affected part is out of warranty submit a Prior Approval Request for goodwill consideration prior to performing the work.

Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Service Procedure:

1. Connect the GDS or GDS-M.

Select '*S/W Management*' on the screen.

2. Select 'Steering Angle Sensor Reset'.



Systems Components	Unfold All
Motor Driven Power Steering	
System Identification	8
 Steering Angle Sensor Reset (Only Column&Housing Assy replacement 	t) 🖃
 Steering Angle Sensor(SAS) Calibration 	8
 Part replacement (Power steering motor) 	
 Part replacement (Power steering ECU) 	
EPS Type Recognition	
Set the steering feel torque to zero	
 MDPS TEST (Motor Driven Power Steering) 	
 Part replacement (Column) 	
Smart Cruise Control	
Tire Pressure Monitoring	۲
Multi-View Camera System	۲
Blind Spot Detection-Left	۲
Blind Spot Detection-Right	۲
Lane Departure Warning System	۲
Adaptive Front Lighting System	۲
Do not touch any system buttons while performing this fun	ction.

3. Review the overview then select '**OK**'.

f	HOME OffLine	SANTAFE(NC)/2017/G 3.3 GDI VCI 🚓 😽 🐼								
		S/W Management 🥥								
	 Steering Angle Se replacement) 	nsor Reset (Only Column&Housing Assy								
	Purpose It is a function to reset the information of new steering angle sensor inside the replaced MDPS column for ECU learning.									
	Enable Condition 2. Engine Stop 3. Remove your hands, after setting steering wheel to centor.									
	Concerned Component	MDPS								
ĺ	Concerned DTC									
ĺ	Fail Safe	Unstable steering during driving								
	Etc	Perform this function only when replacing MDPS column & housing.								
		Do not touch any system buttons while performing this function. HOME OFFLine SANTAFEING/2017/0.3.3 GDI Volume To Tool								
-	Do not touch	any system buttons while performing this function.								
ŕ	Do not touch	any system buttons while performing this function.								
ŕ	Do not touch	Any system buttons while performing this function. SANTAFE(NC)/2017/0 3.3 GDI Steefng VCI = S/W Management Reset (Only Column&Housing Assy replacement)								
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4. Check the conditions and select '**OK**'.

5. Turn the ignition **OFF** and wait for 5 seconds. Then turn ignition back **ON**.

Select '*OK*' to complete the Steering Angle Sensor Reset function.

 Next, from the S/W Management screen, select 'Steering Angle Sensor (SAS) Calibration'.

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		S/W	Management		
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the re	placed MDPS co	lumn for E0	CU learning.		
Inform	ation				
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After	turning the Igniti	on off, wait	for 5 sec.		
After	turning the igniti	on on, pres:	s [OK] button		
			ок		
When	you are ready, p	ress the [O	K] button.		
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	Do not touch		buttons while no	forming this fur	ution
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 Ste 	eering Angle Senso	r(SAS) Calib	ration		
Pa	rt replacement (Po	wer steering	motor)		
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ne Departure Warning System

tive Front Lighting System

Do not touch any system buttons while performing this function.

- 7. Review the overview then select '**OK**.
- SANTAFE(NC)/2017/G 3.3 GDI A HOME -VCI 30 5-6 S/W Management Steering Angle Sensor(SAS) Calibration To calibrate steering angle value on the Electric Power Steering(EPS) ECU to actual steering Purpose angle value of vehicle. 1.Engine Off 2.Ignition Switch On Enable Condition Electric Power Steering(EPS) ECU, Steering Concerned Angle Sensor(SAS) Component Concerned DTC C1261 Fail Safe Warning Lamp On Perform this function when you replace EPS ECU Etc or do work related to EPS. OK . Do not touch any system buttons while performing this function SANTAFE(NC)/2017/G 3.3 GDI ۲ 3-3 A HOME OffLine VCI 32 S/W Management Steering Angle Sensor(SAS) Calibration I Steering Angle Sensor(SAS) Calibration] This function is used to calibrate steering angle values inputted in EPS ECU and in an actual vehicle respectively by making the values the same. Perform this function when you replace EPS ECU or do work related to EPS. If you're ready, press [OK] button. OK Cancel

Do not touch any system buttons while performing this function.

8. Review the overview then select '**OK**'.

9. Check the conditions and select '**OK**'.

10.	Turn the ignition OFF and wait for 15
	seconds. Then turn ignition back ON .

Select '**OK**' to complete the Steering Angle Sensor (SAS) Calibration function.

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