

**HYUNDAI**NEW THINKING.  
NEW POSSIBILITIES.**Technical Service Bulletin**

GROUP

Chassis

NUMBER

14-SS-001

DATE

JANUARY 2014

MODEL(S)

Sonata (YF)

SUBJECT:

YF SONATA MDPS COUPLING REPLACEMENT

**Description:** This bulletin describes the procedure to replace the flexible rubber coupling in the MDPS (motor driven power steering) assembly to address a minor clicking noise when turning the steering wheel in some Sonata (YF) vehicles.



**Applicable Vehicles:** Sonata (YF) vehicles produced from SOP to 12/11/2013

**Parts Information:**

PART NAME	PART NUMBER	QTY
Flexible Coupling	56315-2K000-FFF	1

**Warranty Information:**

Model	Op Code	Operation	Op Time	Causal Part #	Nature Code	Cause Code
YF	56315F00	Replace MDPS flexible coupling	1.5 M/H	56315-2K000-FFF	N29	C06

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

**Service Procedure:**

1. Remove MDPS assembly from the vehicle (refer to shop manual for removal procedure).

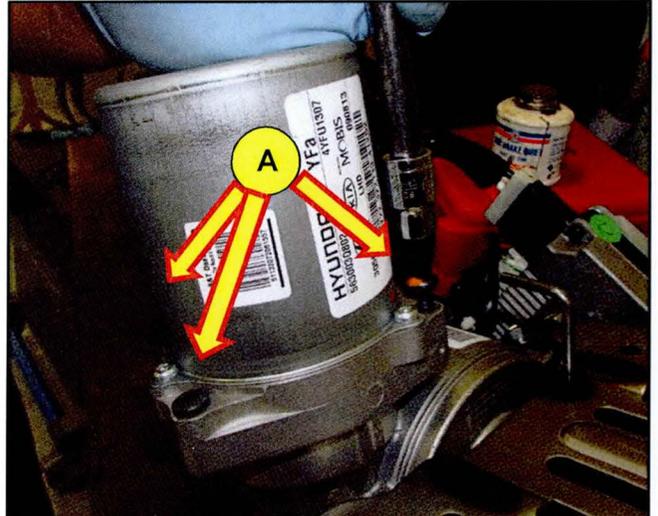
**★ NOTE**

Carefully align the steering wheel to the center position, with the front wheels pointing straight ahead before removing MDPS assembly.

When re-installing MDPS assembly, make sure the steering wheel is aligned to the center position, and that the front wheels are still pointing straight ahead.

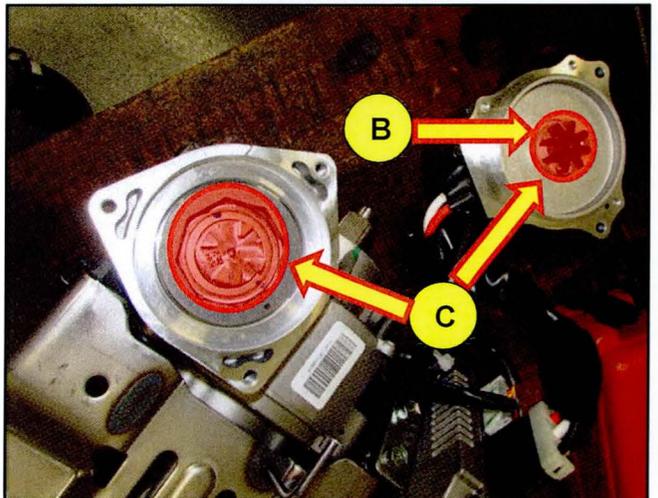


2. Loosen the 3 bolts (A) to remove the MDPS motor using a T25 socket, or similar tool.



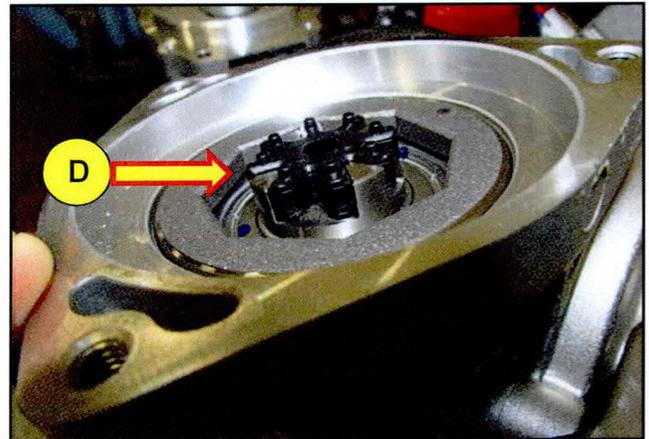
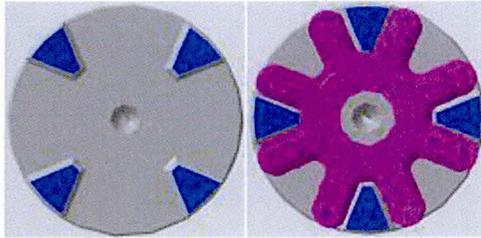
3. Remove rubber coupler (B).

Use an air gun or brush to remove all debris around the coupling seating areas (C).



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- 4. Install new flexible coupler (D) into MDPS assembly. Verify that the coupling is correctly seated.



- 5. Install the motor back onto the assembly and re-install the MDPS assembly into the vehicle in the reverse order of removal.

(Tightening torque MDPS motor bolts: 7.84~11.76 Nm or 0.8~1.2kgf)



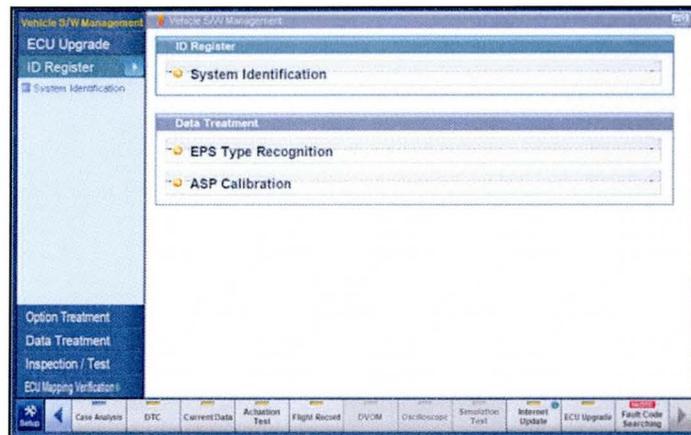
- 6. Connect GDS VCI to DLC connector. Connect VCI to GDS using USB cable. Turn the ignition ON and verify that all electrical systems turn off (no electrical load). Select model and EPS (Electric Power Steering) system, then press "OK" button on the screen.



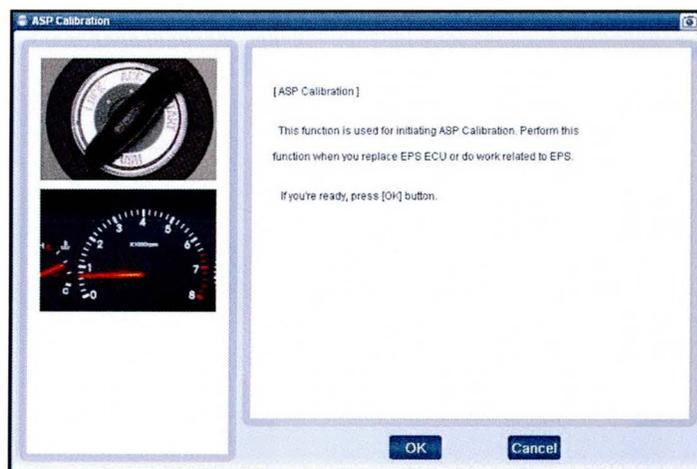
- Select "Option Treatment" under the Vehicle S/W Management tab.



- Select "ASP Calibration."

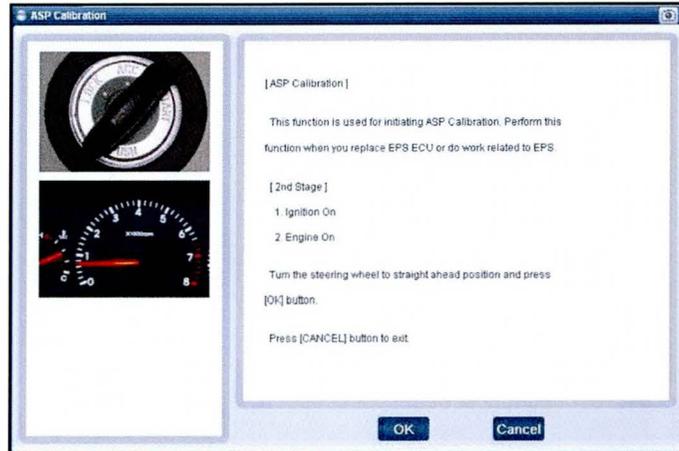


- Press "OK" to continue with ASP calibration.

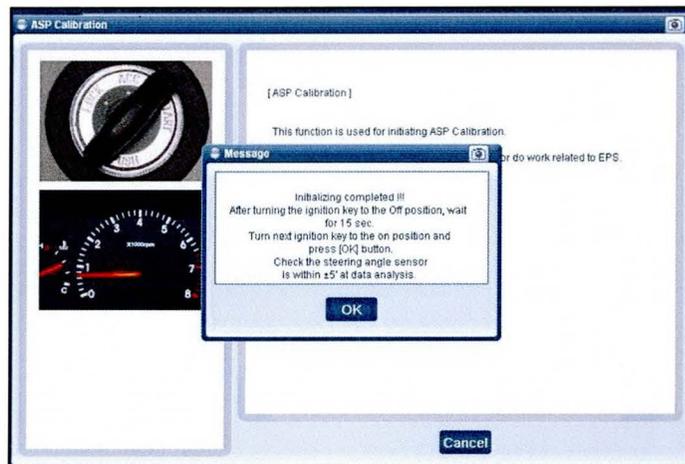


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10. Center the steering wheel with the ignition ON and engine idling, then press “OK.”



11. Turn the ignition OFF and wait for 15 seconds. Then turn the ignition ON and press “OK.”



12. Under Current Data, verify that the Steering Angle Sensor value is at:  $0.0 \pm 5.0$  degrees

Sensor Name	Value	Unit
<input type="checkbox"/> Battery Voltage	11.89	V
<input type="checkbox"/> Steering Wheel Torque	0	Nm
<input checked="" type="checkbox"/> Steering Angle Sensor	0.0	°
<input type="checkbox"/> Calibrated Steering Angle Sensor Offset	0	°
<input type="checkbox"/> Steering Wheel Velocity	2	degree/s
<input type="checkbox"/> Motor Current	0	A
<input type="checkbox"/> Target Motor Current	0	A
<input type="checkbox"/> Target Motor Torque	0	Nm
<input type="checkbox"/> ECU Temperature	31	°C
<input type="checkbox"/> Motor Temperature	36	°C
<input type="checkbox"/> Percentage Of Derating	0	%
<input type="checkbox"/> Vehicle Speed	0	MPH
<input type="checkbox"/> Filtered Vehicle Speed	0	MPH
<input type="checkbox"/> Angle Sensor Index Status	DETECT	-
<input type="checkbox"/> Engine Status	STOP	-
<input type="checkbox"/> Calibration Status	CAL. & INITIAL	-