 <h1 style="text-align: center;">TSB</h1>	Model	Cee'd [ED]()
	Group	Steering System(61)
	TSB No.	KFE08-61-V040-ED
Subject MDPS WORM SHAFT FLEXIBLE COUPLING REPLACEMENT	Published	5/23/2008
	TSB Type	Field Fix
	Area & Distributor	

1. Description

■ Symptom/Condition

Some cee'd (ED) vehicles may exhibit rattle noise from the steering column while driving at 20~60 KPH (12~37 MPH) on uneven road.

■ Cause

Due to impact noise caused by abnormal gap between worm wheel and worm shaft gear

■ Countermeasure

Replace MDPS (Motor Driven Power Steering) worm shaft flexible coupling with new one according to the following service procedure.

2. Applicable Vehicles

■ Model: cee'd(ED)

■ Applicable vehicle production date range : Produced from JOB#1 to Apr. 30, 2008

■ Applicable VIN range :

- cee'd SW: Produced from JOB#1 to U5YFF52128L 055504


- pro cee'd: Produced from JOB#1 to U5YFF23428L 016898

- cee'd 5Door: Produced from JOB#1 to U5YFF24528L 116526

■ Area : Europe

3. Parts Information

■ PARTS REQUIRED

PART NAME	PART NUMBER	REMARK
Flexible coupling	 56315-2H000FFF	

Note)

This TSB has been released after confirming parts availability from MOBIS Korea for your ordering reference. The actual supply of the mentioned part may take over a month upon order.

4. Operation Code And Time

■ WARRANTY INFORMATION

OP CODE	OPERATION	OP TIME	NATURE	CAUSE
51315F00	MDPS worm shaft flexible coupling replacement	1.3 MH	**N29	*C24

**N29 : Abnormal noise

*C24 : Improper clearance

5. Service Procedure

Caution)

During this procedure, do not disassemble any part or component except the worm shaft flexible coupling form the steering column shaft assembly.

■ STEERING COLUMN SHAFT ASSEMBLY REMOVAL

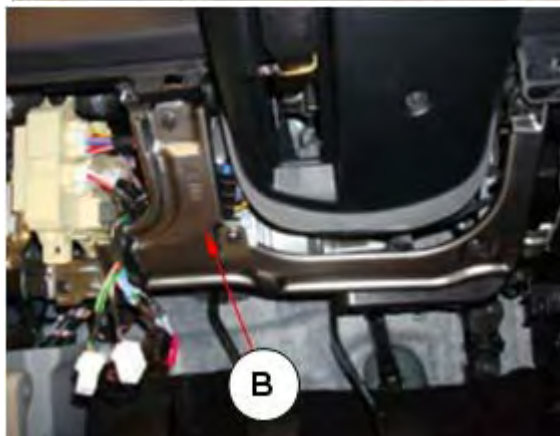
1) Disconnect the battery negative terminal.

2) Remove crash pad side cover and lower cover assemblies (A, A1).



3) Remove the reinforcement (B).

- Tightening torque : 0.5 ~ 0.6 kgf.m



4) Unfasten the driver airbag module mounting screws on the both sides by using a hexagonal wrench.

#C: Driver airbag module



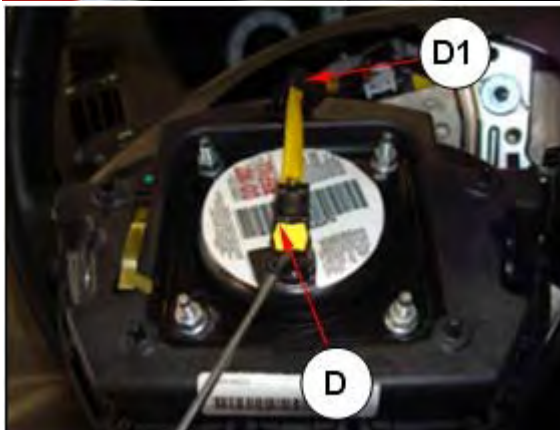
5) Disconnect the airbag module wiring connector (D) then remove the driver airbag module.

6) Remove the airbag module wiring clip (D1).

Caution)

(1) Care not to drop the airbag module.

(2) When re-installing the airbag module, be careful that the SRS wiring does NOT interfere with other parts and is NOT pinched between other parts.



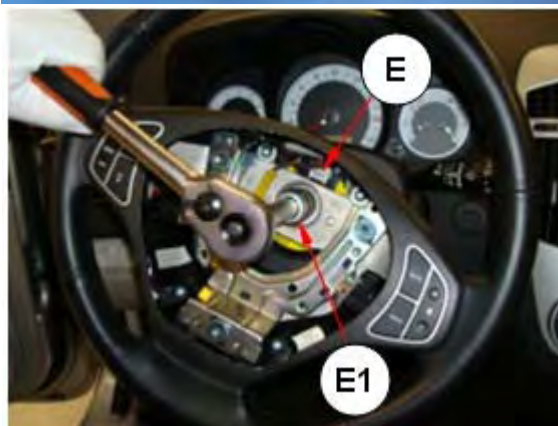
Caution)

Always keep the removed air bag module with its face up.



7) Disconnect the remote control switch wiring connector (E) and remove the steering wheel lock nut and washer (E1).

- Tightening torque : 4.0 ~ 5.0 kgf.m
(39.2~49.0 Nm, 28.9~36.2 lbf.ft)



8) Put a straight mark (E2) on the steering column as shown on the photo to indicate the initial position of steering wheel before removal of steering wheel.

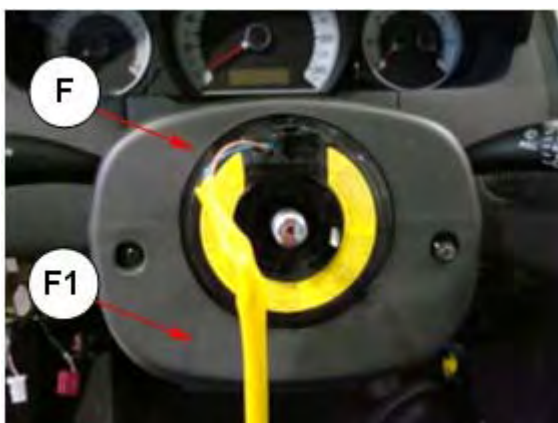


9) Remove the steering wheel from the steering column by using SST (no.: 09561-11001).

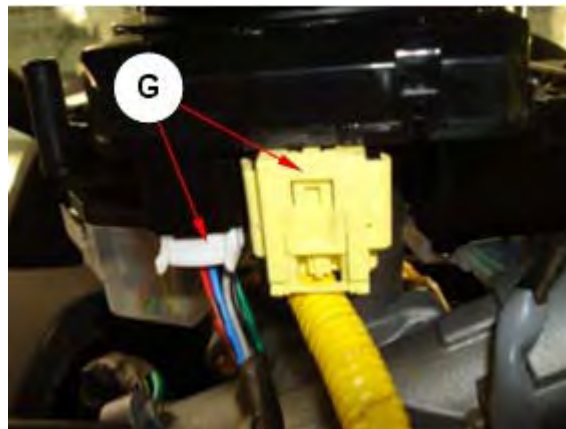
Caution)

Do not use a hammer or equivalent. This can cause damage of steering column and MDPS unit.

10) Remove the steering column upper and lower shrouds (F, F1).



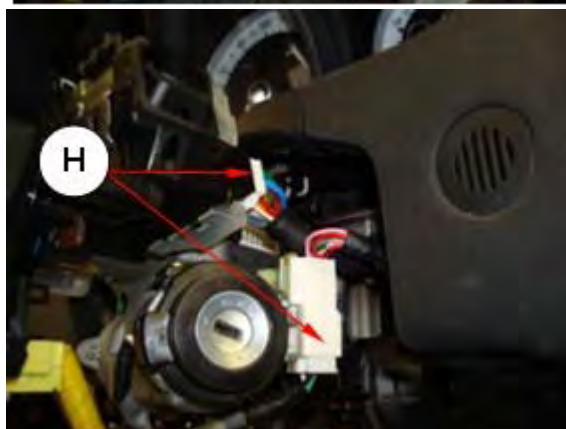
11) Disconnect the 2 wiring connectors (G) under the clock spring.



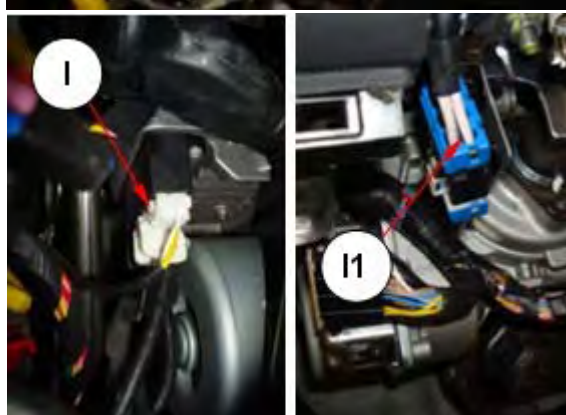
12) Disconnect the wiring connector (G1) on the upper of clock spring.



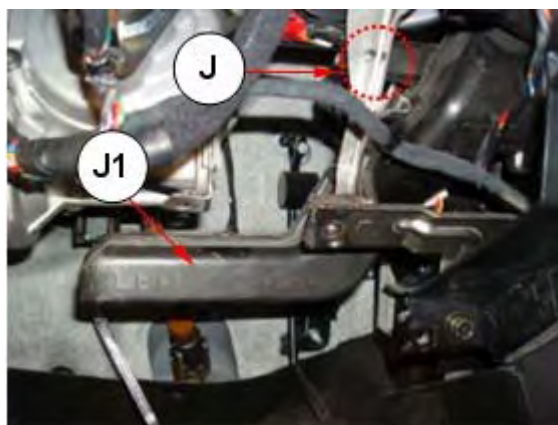
13) Disconnect the 2 wiring connectors (H) on the upper of ignition switch.



14) Disconnect the 3 MDPS control unit wiring connectors (I) and the ignition switch wiring connector (I1).

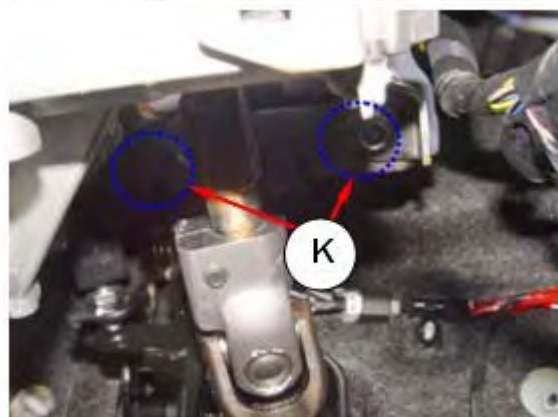


15) Remove the air duct (J) by unfastening the screw (J1).



16) Remove the steering column lower mounting bolts (K).

- Tightening torque : 1.3 ~ 1.8 kgf.m
(12.7~17.7 Nm, 9.4~13.0 lbf.ft)



17) Remove the steering column upper right and left mounting nuts (L).

- Tightening torque : 1.3 ~ 1.8 kgf.m
(12.7~17.7 Nm, 9.4~13.0 lbf.ft)



18) Unfasten the column shaft mounting bolt (M) and remove the steering column shaft assembly.

- Tightening torque : 3.0 ~ 3.5 kgf.m
(29.4~34.3 Nm, 21.7~25.3 lbf.ft)



Caution)

After removing the steering column shaft assembly, use a care not to damage the multi function switch (N) assembled with it.

**■ STEERING COLUMN MOUNTING BRACKET REMOVAL**

1) Remove the steering column shaft assembly from the vehicle according to the applicable shop manual.

2) In case of vehicle produced before Jan. 14, 2008, remove the steering column lower mounting bracket (S) by unfastening the 4 mounting bolts with a hexagonal wrench.

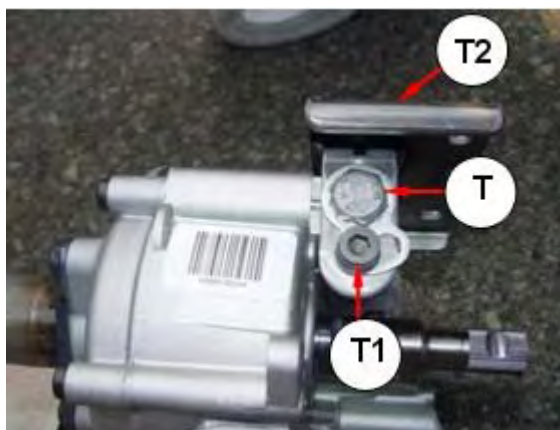
- Tightening torque : 0.9 ~ 1.3 kgf.m
(8.8~12.7 Nm, 6.5~9.4 lbf.ft)



3) Remove the steering column lower bracket (T2) by unfastening the mounting bolts (T, T1).

- T : 0.7 kgf.m (6.9 Nm, 5.1 lbf.ft)

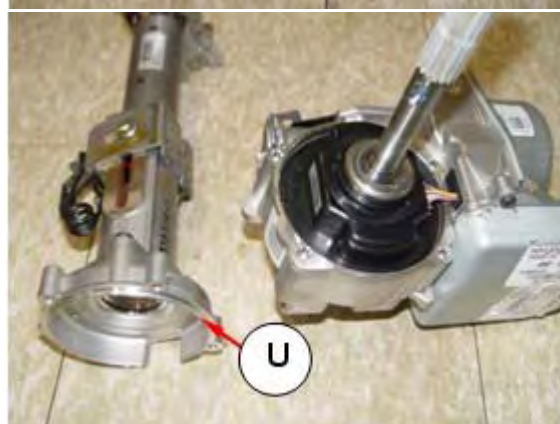
- T1 : 1.3 ~ 1.8 kgf.m(12.7~17.7 Nm, 9.4~13.0 lbf.ft)



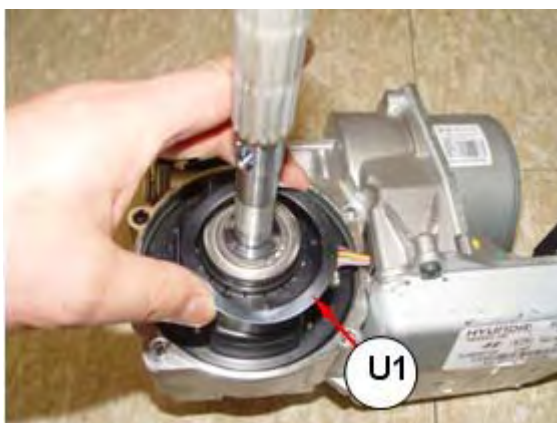
4) Remove the power head (U) by unfastening the 4 mounting bolts.

- Tightening torque : 0.9 ~ 1.3 kgf.m

(8.8~12.7 Nm, 6.5~9.4 lbf.ft)



5) Remove the wave washer (U1).1

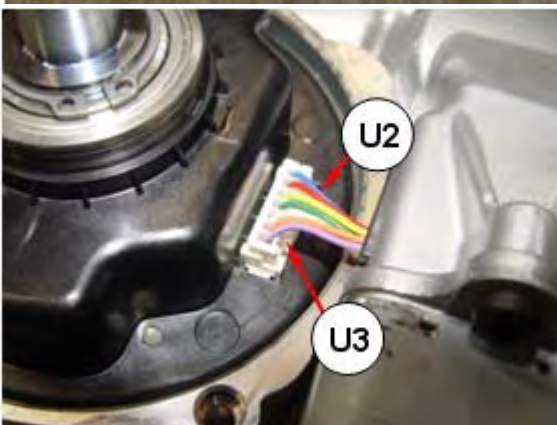


6) Disconnect the sensor wiring connector.

Caution)

Unlock the connector by pushing the lock button (U3).

Do not pull the sensor wiring (U2), but the connector housing.



7) Remove the MDPS ECU (U4) by unfastening the 3 mounting bolts.

- Tightening torque: 0.6 kgf.m(5.9 Nm, 4.3 lbf.ft)

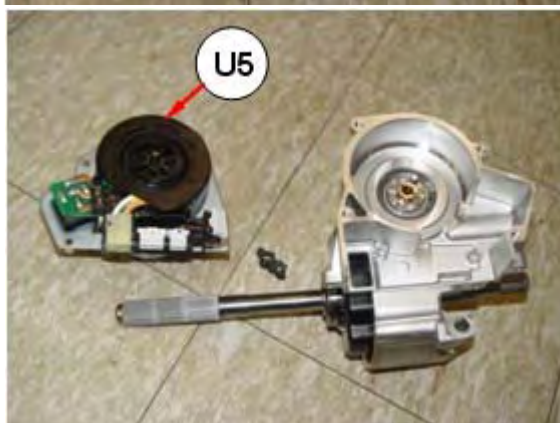
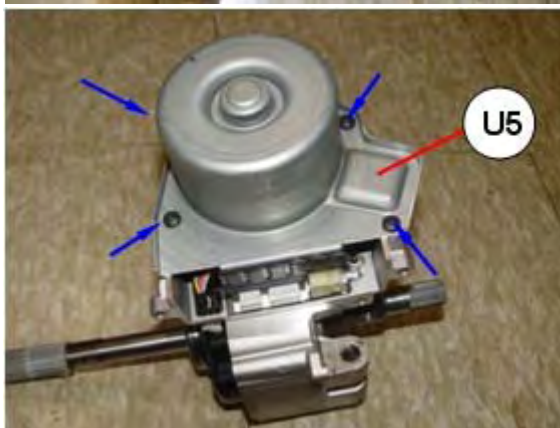
Caution)

Care not to damage the wiring connector pins of MDPS ECU.



8) Remove the MDPS motor assembly (U5) by unfastening the 4 mounting bolts.

- Tightening torque: 0.6 kgf.m(5.9 Nm, 4.3 lbf.ft)

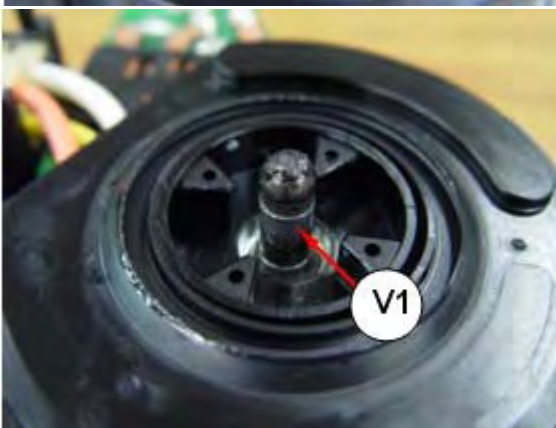


9) Carefully remove the flexible coupling (V) from the MDPS motor assembly.

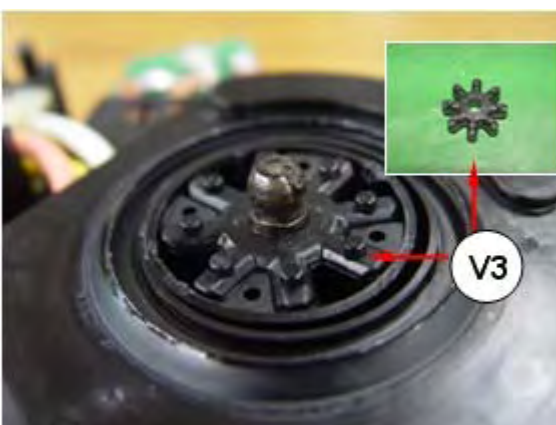
Caution)

(1) When removing the flexible coupling, be careful not to turn the motor pin (V1).

(2) Do not turn the worm shaft (V2).



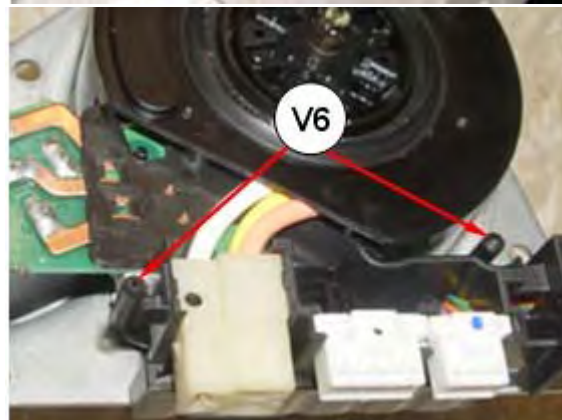
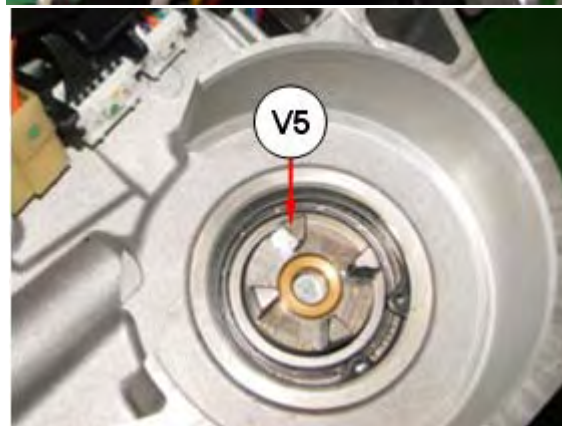
10) Assemble the newly improved flexible coupling (V3) with the MDPS motor assembly.

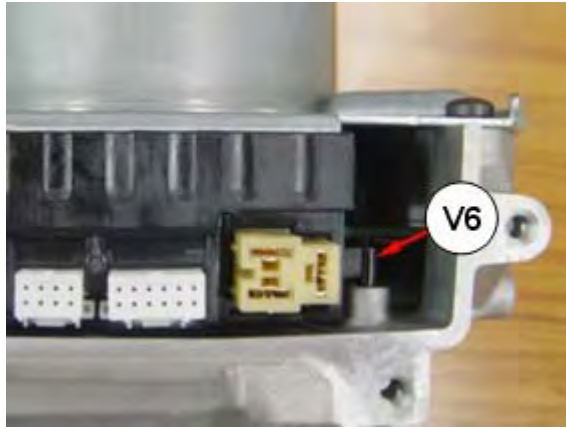


11) Assemble motor assembly and worm shaft.

Caution)

- (1) Make sure that the flexible coupling teeth (V4) engages with worm shaft teeth(V5) exactly.
- (2) Make sure that the motor assembly fixing pins (V6) fits with motor housing fixing holes (V7).





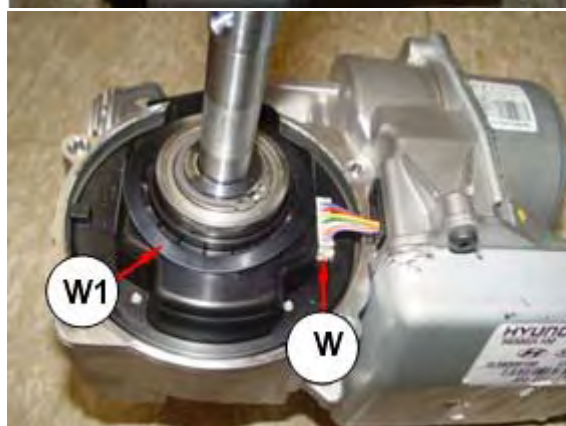
12) Assemble the MDPS ECU with the motor assembly.

Caution)

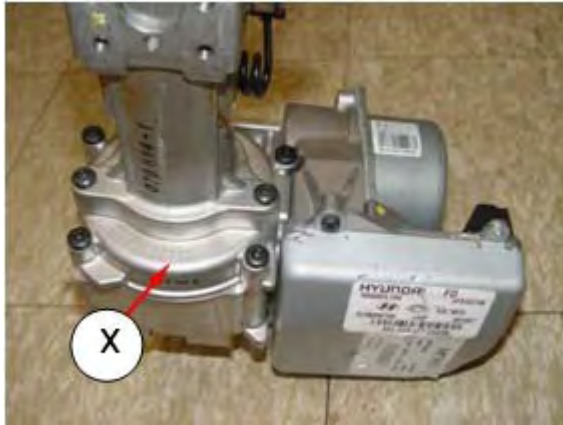
Connecting the wiring connectors of motor assembly and MDPS ECU may be a little stiff, but it is normal. While connecting the wiring connectors, be careful not to damage the connector pins.



13) Connect the sensor wiring connector (W) and assemble the wave washer (W1).



14) Assemble the power head (X).



15) Connect the wiring connector (X1).



16) Assemble steering column assembly mounting bracket.

* This photo shows for a part for vehicles produced before Jan. 14, 2008.



17) Install the steering column shaft assembly to the vehicle in reverse order of removal.

18) Connect the battery negative terminal, then conduct ASP (Absolute Steering Position) calibration procedure according to the applicable shop manual and check DTC with Scan tool.