	GROUP TRA	MODEL 2011-2020MY Sportage (SL, QL) 2013-2020MY Sorento (XMa, UMa)
	NUMBER 086	DATE November 2019
SUBJECT: TECHNICAL SERVICE BULLETIN		
PARTIAL REPAIR OF 4WD COUPLING		

This bulletin provides the procedure information regarding the partial repair of the Four Wheel Drive (4WD) Coupling Assembly, Pressure Sensor, Actuator Motor or 4WD harness on some 2011-2016 Sportage (SL, QL) and Sorento (XMa, UMa) 4WD vehicles for a concern regarding:

- Oil leakage from the 4WD coupling assembly
- 4WD Malfunction and MIL lamp ON with DTCs
- Abnormal noise or vibration while driving

To correct any one of these concerns, refer to the repair table on page 2 and follow the recommended repair procedure outlined for each concern.



File Under: <Transmission>

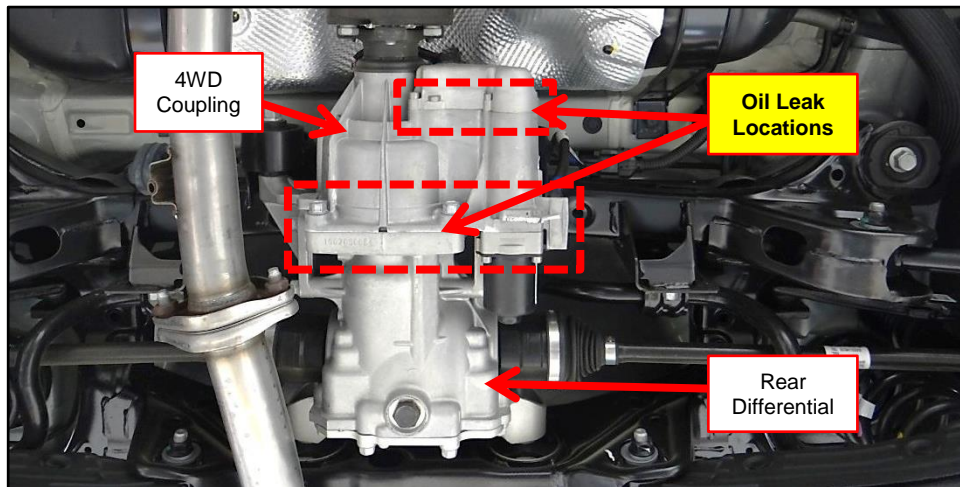
---

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

SUBJECT: **FOUR WHEEL DRIVE (4WD) COUPLING REPAIR**

**4WD Coupling - Repair Table:**

1. Oil is leaking from the 4WD coupling assembly (between the coupling housing or where it connects to the rear differential. (Refer to both red outlined areas in the image).
2. MIL is ON (Refer to the DTCs listed in the table below).
3. Noise and/or vibration is present when vehicle is driven (Refer to audio clip).



No.	Concern Type	Confirmation		Remedy
1.	Oil Leaking	4WD Coupling Visual <u>Leak</u> Noticed		Replace the <u>4WD Coupling</u>
2.	MIL ON with <u>DTCs</u>	P1820, P1821	Motor overcurrent	Replace the 4WD Coupling <u>*Actuator Motor</u>
		P1822	Motor open circuit	
		P1823	Motor low voltage	
		P1824	Motor overload	
		P1829, P1830	Low actual torque	
		P1833, P1834	Motor overheating	Replace the 4WD Coupling <u>Pressure Sensor</u>
		P1825, P1826	Sensor over/low voltage	
		P1827	Sensor battery short circuit	
				P1828
		P1831, P1832	4WD coupling overload	
3.	Noise and/or Vibration	Noise and/or vibration is present while driving. <u>Click for:</u> <a href="#">Noise/Vibration Audio</a>		Replace the <u>4WD Coupling</u>

**\*Note:** Sportage (SL) vehicles manufactured from October 2010 through March 2013 **only** are equipped with an older version actuator motor and harness. **Replace both the actuator motor and harness with new parts.** The harness **is not** a required replacement part for all of the other applications listed in this bulletin.

SUBJECT:

## FOUR WHEEL DRIVE (4WD) COUPLING REPAIR

**4WD Coupling Replacement Procedure:**

1. Remove the 4WD Coupling Assembly by referring to the "4 Wheel Drive (4WD) System → Coupling Assembly → Direct Electro Hydraulic Actuator Coupling → Repair procedures" chapter in the applicable Shop Manual on KGIS.

**\* NOTICE**

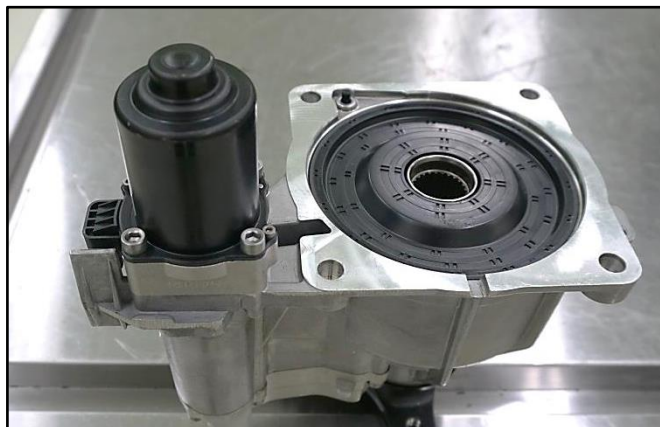
Use caution not to tip the 4WD coupling assembly with the actuator motor facing down as oil may escape.



**Note:** The new 4WD Coupling assembly is pre-filled with fluid and includes the attached Actuator Motor.

**4WD Actuator Motor Replacement Procedure:**

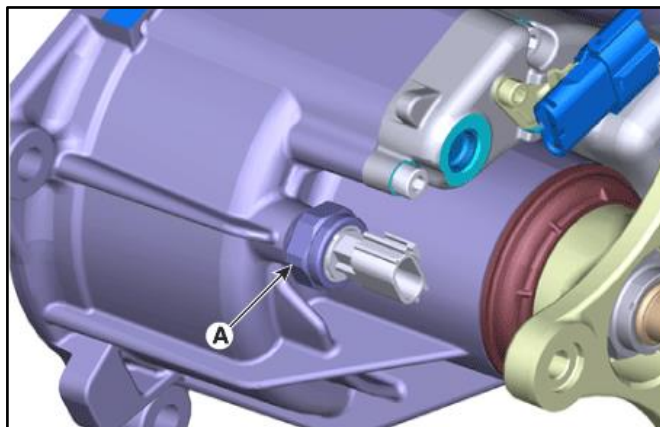
1. Refer to **4WD Coupling Replacement Procedure** outlined above.
2. Remove the 4WD Actuator Motor Assembly by referring to the "4 Wheel Drive (4WD) System → Coupling Assembly → Oil hydraulic Motor (Actuator) → Repair procedures" chapter in the applicable Shop Manual on KGIS.



**Note:** Use caution not to tip the 4WD coupling assembly with the actuator motor facing down as the existing oil may escape.

**4WD Pressure Sensor Replacement Procedure:**

1. Disconnect the 4WD pressure sensor (A) connector harness and using a 24mm wrench, remove the pressure sensor (A).







SUBJECT:

## FOUR WHEEL DRIVE (4WD) COUPLING REPAIR

## AFFECTED VEHICLE RANGE:

Model	Production MY Range
Sportage (SL)	2011MY-2016MY
Sportage (QL)	2017MY-2020MY
Sorento (XMa)	2013MY-2016MY
Sorento (UMa)	2017MY-2020MY

## REQUIRED PART:

Part Name	Part Number	Figure	Remarks
4WD Coupling Assembly	47800 3B520FFF		<u>Replace if:</u> Leaking oil, MIL ON with DTCs, makes noise/vibration.
4WD Pressure Sensor	47820 3B500FFF		<u>Replace if:</u> MIL ON with DTCs
4WD Actuator Motor	47810 3B520FFF		<u>Replace if:</u> MIL ON with DTCs
4WD Wire Harness	47891 3B310FFF		<u>Replace ONLY if:</u> Sportage (SL) produced from 10/2010 – 03/2013

SUBJECT:

## FOUR WHEEL DRIVE (4WD) COUPLING REPAIR

**CONCERN 1: OIL LEAKING**

WARRANTY INFORMATION:

N Code: B25 C Code: ZZ1

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	47800 3B520	0	4WD <u>Coupling</u> Replacement	47800F05	0.7 M/H	47800 3B520FFF	1

**CONCERN 2: MIL ON WITH DTC(S)**

WARRANTY INFORMATION:

N Code: I3A C Code: ZZ1

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	47810 3B520	0	4WD Actuator <u>Motor</u>	47800F07	0.9 M/H	47810 3B520FFF	1
	47810 3B520	0	4WD Actuator <u>Motor</u> and Wire Harness Replacement <b>Sportage (SL) produced from 10/2010 – 03/2013</b>	47800F08	0.9 M/H	47810 3B520FFF 47891 3B310FFF	1
	47820 3B500	0	4WD Coupling <u>Pressure Sensor</u> Replacement	47800F09	0.5 M/H	47820 3B500FFF	1
	47800 3B520	0	4WD <u>Coupling</u> Replacement	47800F10	0.7 M/H	47800 3B520FFF	1

**CONCERN 3: NOISE AND/OR VIBRATION**

WARRANTY INFORMATION:

N Code: Q55 C Code: ZZ5

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	47800 3B520	0	4WD <u>Coupling</u> Replacement	47800F12	0.7 M/H	47800 3B520FFF	1