



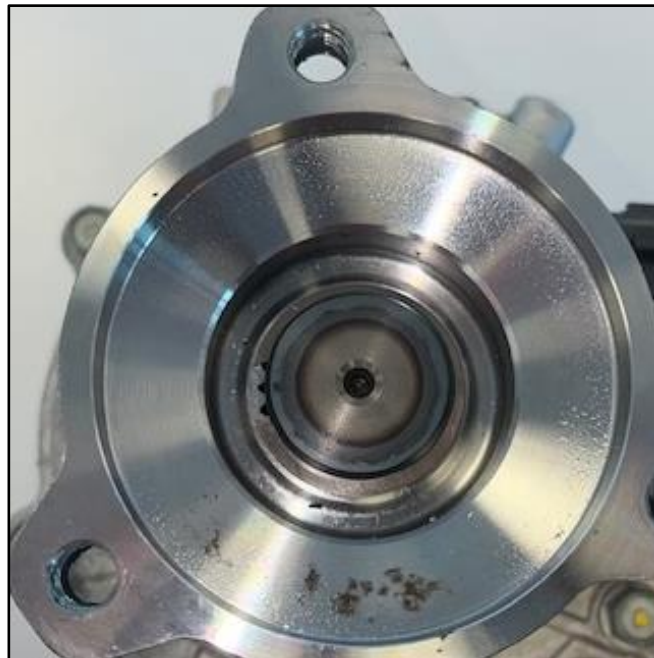
GROUP	MODEL
TRA	2020-2022MY Multiple Models
NUMBER	DATE
105	November 2023

TECHNICAL SERVICE BULLETIN

4WD COUPLING NOISE INSPECTION AND SNAP RING REPLACEMENT

SUBJECT:

This bulletin provides information to inspect for a knocking/clicking noise present in the rear of the vehicle during low-speed driving (25MPH or less) on some 2020-2022MY Kia vehicles equipped with All Wheel Drive (AWD). The 4WD coupling snap ring may have excessive play between the drive gear set shaft and coupling flange. If the noise is present, follow the inspection procedure outlined in this bulletin to replace the 4WD coupling snap ring.



Inspection Procedure:

1. Confirm noise is present at speeds of 25MPH or less (refer to videos below).



Click

For additional tips, information, click the icon or scan the QR code to listen to the noise outside of the vehicle.

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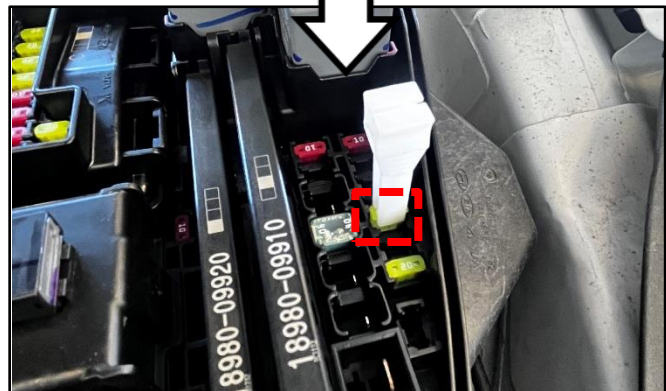
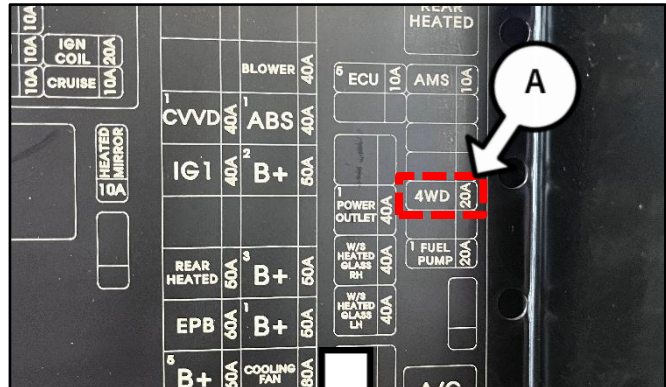
Click

For additional tips, information, click the icon or scan the QR code to listen to the noise inside the vehicle.

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n**NOTICE**

If noise present in the vehicle does not resemble the noise in the videos above, **this TSB does NOT apply.**

2.
 - If the noise is present and it resembles the noise in the referenced videos, remove the '20A' 4WD fuse (A) located in the engine room junction block and test drive vehicle again at speeds of 25MPH or less.
 - If a noise is present and does NOT resemble the noise in the referenced videos, **this TSB does not apply.**

**NOTICE**

DL3a junction block shown. ON, MQ4a, and MQ4 P/HEV junction block fuse orientation may be different.

3.
 - If the noise is no longer present, then proceed to the 'Replacement Procedure' on page 3.
 - If the noise is still present (other condition), refer to KGIS for troubleshooting procedures. **This TSB does not apply.**

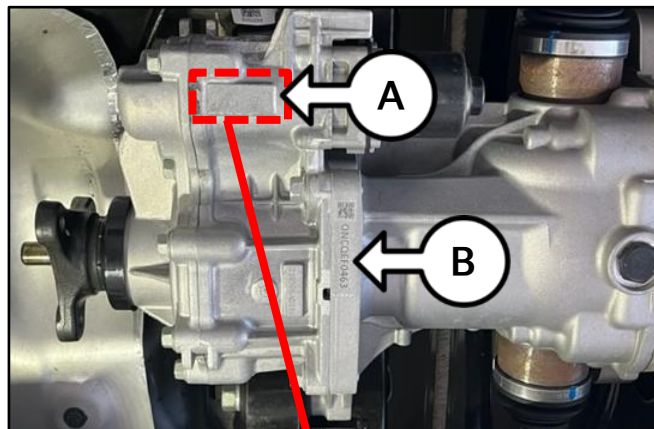
SUBJECT: 4WD COUPLING NOISE INSPECTION AND SNAP RING REPLACEMENT
Replacement Procedure:

1. Raise vehicle on lift.



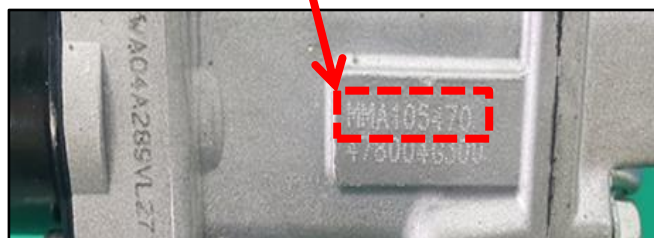
2. Place the vehicle in 'Neutral' (N).

3. Identify the nine (9) digit serial number (A) located on the 4WD Coupling (B).



4. Notate the nine (9) digit serial number (A).

Note: If the serial number is illegible, replace the coupling assembly with DPSM approval. (DSA-A dealers do not require DPSM approval.)



5. Select the '4WD Coupling Guide' (C) located in the 'Quick Links' section of KGIS.



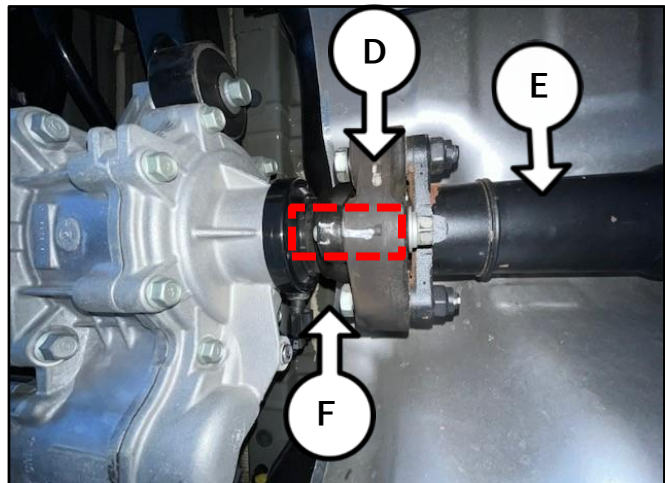
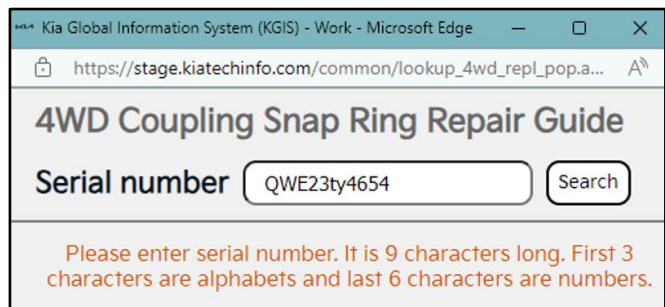
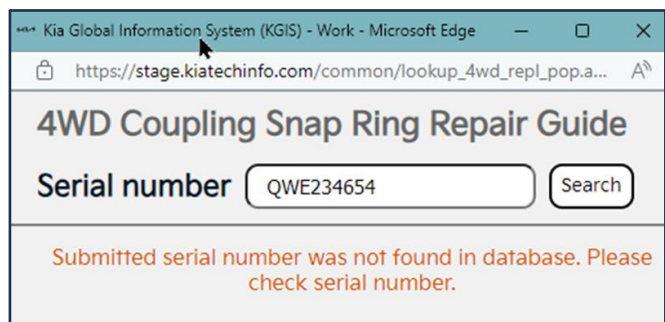
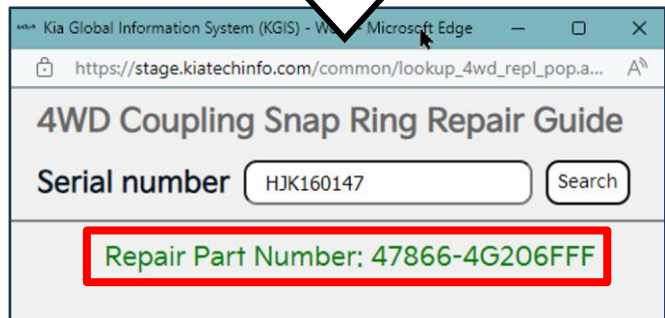
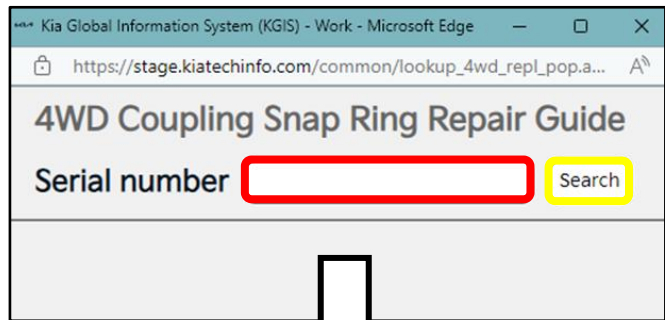
SUBJECT: 4WD COUPLING NOISE INSPECTION AND SNAP RING REPLACEMENT

6. Enter the nine (9) digit serial number (A) into the '4WD Coupling Snap Ring Repair Guide' pop-up window, as shown.
7. Select 'Search'.

The corresponding snap ring part number will be displayed in **green**.

- If the incorrect serial number is input, the pop-up displays the message 'Submitted serial number was not found in database. Please check serial number.'. Clear and reenter the serial number.
- If too many numbers are input, the pop-up displays the message 'Please enter serial number. It is 9 characters long. First 3 characters are alphabets and last 6 characters are numbers.'. Clear and reenter the serial number.

8. Make an alignment mark on the rubber coupling (D) of the propeller shaft (E) and a corresponding mark on the 4WD Coupling (B) flange (F).



SUBJECT:

4WD COUPLING NOISE INSPECTION AND SNAP RING REPLACEMENT

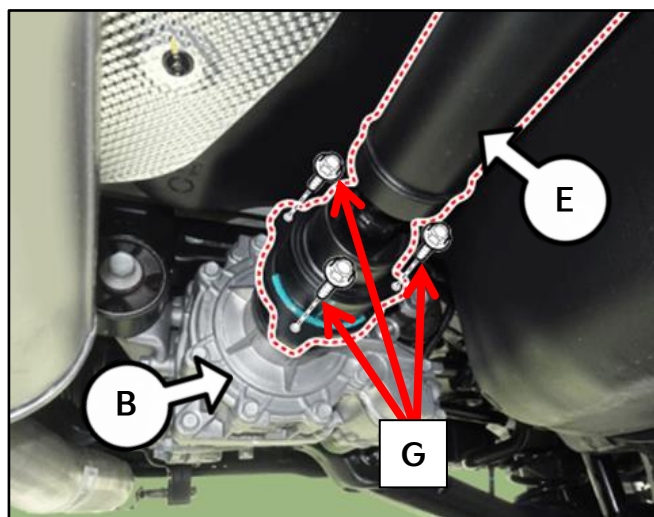
9. Loosen the three (3) propeller shaft retaining bolts (G) from the 4WD coupling (B).

NOTICE

DO NOT reuse the propeller shaft mounting bolts.



Tightening torque for bolts (C):
 Telluride (ON)
 42.0 - 47.7 lb.ft (56.9 - 64.7 N.m)
 K5 (DL3a)
 36.1 - 50.6 lb.ft (49.0 - 68.6 N.m)
 MQ4a & MQ4 P/HEV
 39.8 - 50.6 lb.ft (53.9 - 68.6 N.m)



10. Loosen the two (2) center bearing bracket bolts (H) and lower propeller shaft (E).

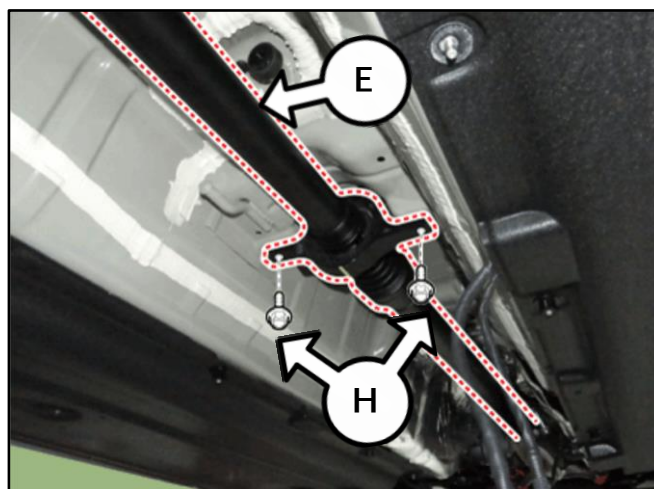


Tightening torque for bolts (E):
 Telluride (ON)
 36.1 - 50.6 lb.ft (49.0 - 68.6 N.m)

**TECH TIP**

Use a cable tie/strap to hold/secure the propeller shaft. It is not necessary to completely remove the propeller shaft.

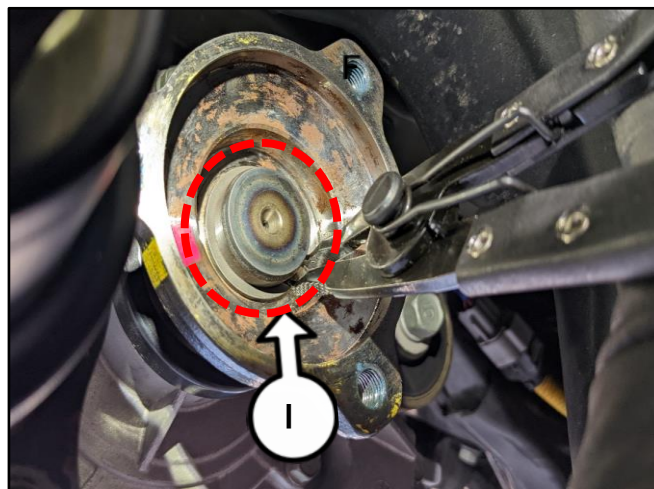
*****Only required on 2022-2023MY Telluride (ON) models.**



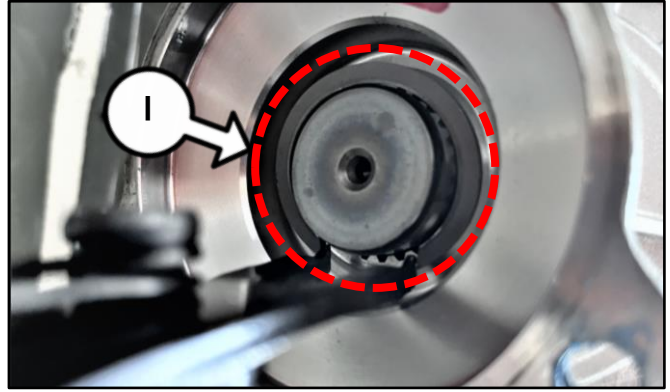
11. Using a snap ring plier, remove the snap ring (I).

IMPORTANT

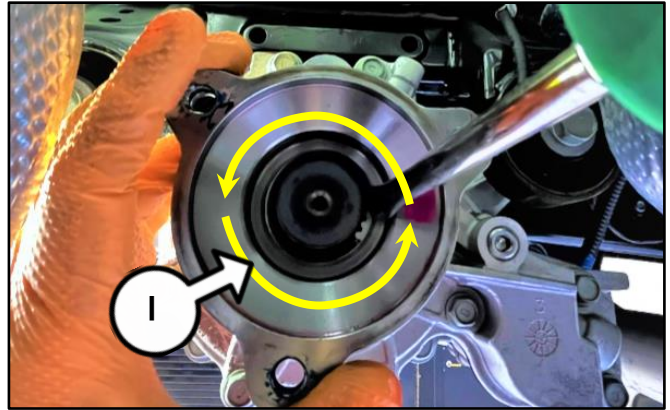
The 4WD coupling does NOT need to be removed from the vehicle. Removing the coupling from the vehicle can cause fluid to leak, which cannot be replenished. If fluid leaks from the coupling, the coupling will need to be replaced.



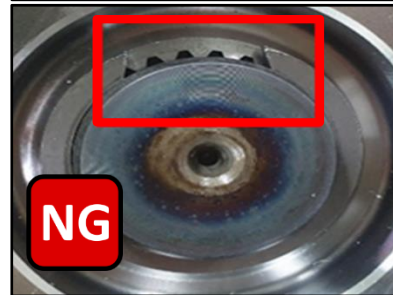
12. Install the new snap ring (I).



13. Using the snap ring plier or a flathead screwdriver, confirm the newly installed snap ring (I) rotates properly.



- 14.
- If the number of visible splines is 2.5 - 3 splines (OK), proceed to step 15.
 - If the number of visible splines is 4 - 5 splines (NG), the snap ring will need to be replaced with a new one.



15. Install all removed parts in the reverse order of removal.

NOTICE


Make sure to reassemble the propeller shaft retaining bolts (G) in the same position they were removed from. Failure to do so may cause an imbalance in the propeller shaft which may lead to a vibration at high speeds.

16. Confirm normal vehicle operation.




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AFFECTED VEHICLE RANGE:

Model	Production Date Range
Telluride (ON)	January 9, 2019 to January 9, 2022
K5 (DL3a)	March 27, 2020 to January 27, 2022
Sorento (MQ4a)	September 10, 2020 to January 27, 2022
Sorento (MQ4 P/HEV)	September 2, 2020 to August 13, 2021

REQUIRED TOOL:

Tool Name	Figure	Comments
Snap Ring Plier		Locally Sourced

REQUIRED PART:

Model	Part Name	Part Number	Thickness Spec.	Figure	Qty.
All	Snap Ring	47866 4G194FFF	1.94t		1
		47866 4G198FFF	1.98t		
		47866 4G202FFF	2.02t		
		47866 4G206FFF	2.06t		
		47866 4G210FFF	2.10t		
		47866 4G214FFF	2.14t		
ON	Propeller Shaft Bolts	49129 C5200	Not Reusable		3
DL3a MQ4a MQ4 P/HEV		11435 10256K			

WARRANTY INFORMATION:
N Code: Q85 C Code: ZZ1

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
W	Refer to EPC for 4WD Coupling Part Number	0	4WD Coupling Noise Inspection	47866F00	0.2 M/H	N/A	0
			4WD Coupling Noise Inspection + Snap Ring Replacement	47866F02	0.6 M/H	Refer to Parts Table	1

