

| GROUP  | MODEL                          |
|--------|--------------------------------|
| TRA    | 2021-2023MY<br>Multiple Models |
| NUMBER | DATE                           |
| 108    | September 2023                 |

# TECHNICAL SERVICE BULLETIN

# SUBJECT: 4WD COUPLING ACTUATOR ASSEMBLY REPLACEMENT

This bulletin provides information to replace the AWD coupling actuator assembly on some 2021-2023MY Kia AWD models listed on page 4. The affected vehicles may exhibit an inoperative AWD system (also referred to as 4WD) capability concern which may be caused by abnormal wear of the motor brushes inside the actuator assembly. This condition will cause the warning lamps on the instrument cluster to illuminate with stored DTC(s) P195800 and/or P19600. Follow the procedure outlined in this publication to inspect and, if necessary, replace the AWD coupling actuator assembly on the applicable vehicles.

#### DTC Description:

P195800 - 4WD Torque Error

P196000 - 4WD Bleeding Pressure Error



# **■** NOTICE

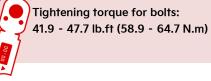
A Technical Service Bulletin is a field fix repair program without customer notification that may be performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

# **4WD COUPLING ACTUATOR ASSEMBLY REPLACEMENT**

### **Replacement Procedure:**

- Confirm an inoperative AWD/4WD condition is present with stored DTC(s) P195800 and/or P196000.
  - If DTC(s) is/are not stored, then this TSB does not apply.
- 2. Disconnect the negative (-) battery terminal.
- Remove the 4WD Coupling Assembly (A) by 3. 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.





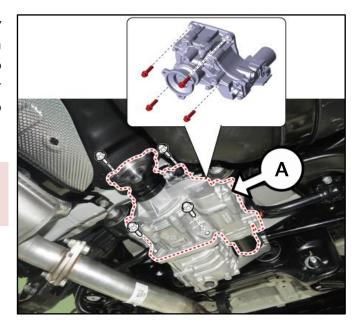
#### **(i)** IMPORTANT

DO NOT tilt the AWD/4WD coupling assembly on its side or remove the actuator with the coupling assembly installed on the vehicle as the existing oil may leak out.



Only the rear side of the propeller shaft needs to be removed to remove the coupling assembly.

Using an air gun, clean the exterior area of the actuator (B) to prevent any dust/debris entering the coupling assembly before dissassembly.







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5. Loosen the four (4) bolts to remove the AWD/4WD coupling actuator (B).

Note: Keep the coupling assembly (A) in the vertical position.



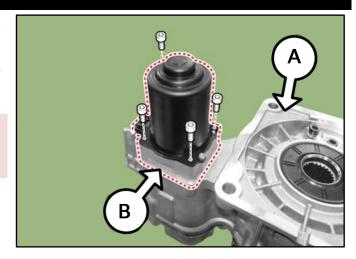
Tightening torque for 4WD Coupling Actuator Bolts:

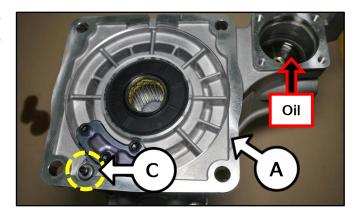
7.2 - 8.6 lb.ft (9.8 - 11.7 N.m)

#### ① IMPORTANT

<u>DO NOT</u> tip the 4WD coupling assembly on its side as the existing oil may leak out.

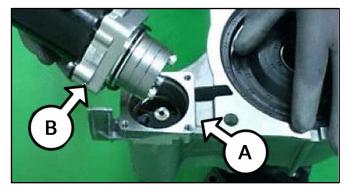
 To avoid oil spillage from the actuator mounting area, press down on the air breather valve (C) to drain the accumulated oil back into the coupling assembly (A) housing.





7. Install 'new' actuator (B) onto coupling assembly (A).

<u>Note</u>: Lightly lubricate the O-ring prior to installating the new actuator.

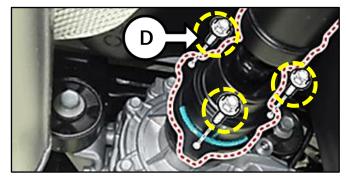


8. Reinstall all removed parts in reverse order.

Note: <u>Install 'new' mounting bolts</u> (D) when reinstalling the propeller shaft.

#### **NOTICE**

<u>DO NOT reuse</u> the 'old' removed propeller shaft mounting bolts (D).



9. Confirm normal vehicle operation.



# 4WD COUPLING ACTUATOR ASSEMBLY REPLACEMENT

#### AFFECTED VEHICLE RANGE:

| Model Year  | Model                           | Production Date Range               |
|-------------|---------------------------------|-------------------------------------|
| 2021-2023MY | K5 (DL3a)                       | August 25, 2020 to July 31, 2022    |
| 2021-2022MY | Sorento (MQ4a)                  | September 18, 2020 to July 31, 2022 |
| 2021-2023MY | Sorento (MQ4 HEV)               | September 16, 2020 to July 31, 2022 |
| 2022-2023MY | Sorento (MQ4 PHEV)              | June 29, 2021 to July 31, 2022      |
| 2023MY      | Sportage (NQ5, NQ5a, NQ5 P/HEV) | December 15, 2021 to July 31, 2022  |

#### **REQUIRED PART:**

| Model                          | Part Name                         | Part Number  | Figure   | Qty. |
|--------------------------------|-----------------------------------|--------------|--|------|
| All                            | Actuator Assembly                 | 47899 4G300  | The second secon | 1    |
| NQ5,<br>NQ5 P/HEV              | Propeller Shaft<br>Mounting Bolts | 49129 L8000  |  | 3    |
| DL3, NQ5a<br>MQ4a<br>MQ4 P/HEV |                                   | 11435 10256K |  |      |

#### **WARRANTY INFORMATION:**

N Code: I12 C Code: ZZ3

| Claim<br>Type | Causal P/N  | Qty. | Repair<br>Description            | Labor Op<br>Code | Op<br>Time | Replacement<br>P/N                       | Qty. |
|---------------|-------------|------|----------------------------------|------------------|------------|--|------|
| W             | 47899 4G300 | 1    | Actuator Assembly<br>Replacement | 47801F01         | 0.7<br>M/H | 49129 L8000<br><u>or</u><br>11435 10256K | 3    |

