



Technical Service Bulletin

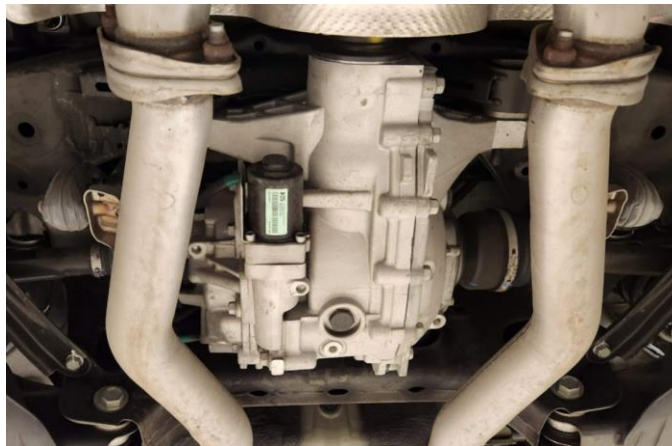
GROUP	NUMBER
DRIVESHAFT AND AXLE	23-DS-003G
DATE	MODEL(S)
NOVEMBER 2023	GV60 (JW1) GV70 (JK1) GV70 (JK1A) GV80 (JX1)

SUBJECT: E-LSD ACTUATOR DIAGNOSIS AND REPLACEMENT

This TSB supersedes 23-DS-001G-1 to add GV60 (JW1) and GV70 (JK1A), expand the applicable vehicles production dates, and include updated actuator dates.

Description: When servicing any of the specified vehicles below with the corresponding DTCs, follow the step-by-step procedures in this bulletin.

- Electronic-Limited Slip Differential (E-LSD) actuator DTC codes P188213, P188900, or P189600



Applicable Vehicles:

- 2023MY GV60 (JW1) produced from 08/19/2022 – 07/15/2023
- 2022-23MY GV70 (JK1) produced from 03/10/2021 – 07/05/2023 (VIN begins with “KMU”)
- 2024MY GV70 (JK1A) produced from 05/16/2023 – 09/26/2023 (VIN begins with “5NM”)
- 2021-23MY GV80 (JX1) produced from 07/27/2020 – 07/03/2023

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 Information

“JK1” refers to both JK1 (Korean) and JK1A (USA).

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
GV60 (JW1)	47892F02	E-LSD ACTUATOR REPLACEMENT	1.5 M/H	47490-18000	I3A	ZZ3
GV70 (JK1)				47892-4J000		
GV80 (JX1)						

NOTE 1: Normal warranty applies.

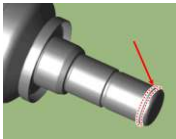
NOTE 2: Submit claim on Claim Entry Screen as “Warranty” type.

NOTE 3: This TSB includes Repair validation photos. Op times including VIN, Mileage, and Repair validation photos as outlined in the Digital Documentation Policy.

NOTE 4: The incident parts are subject to callback through the normal Warranty Technical Center (WTC) parts return process. **Claim is subject to debit if the part is not returned.**

NOTE 5: If a part is found in need of replacement while performing this TSB and the affected part is still under warranty, submit a separate claim using the same repair order. If the affected part is out of warranty, submit a Prior Approval request for goodwill consideration prior to performing the work.

Parts Information:

Part Number	Part Description	Photo	Model	Remarks
47490-18000	E-LSD Actuator		GV60 (JW1)	 Confirm date on actuator label is 06/01/2023 or after upon receipt.
47892-4J000			GV70 (JK1) GV80 (JX1)	 Confirm date on actuator label is 05/31/2023 or after upon receipt.
49551-4T000	Castle Lock Nut		GV70 (JK1) GV80 (JX1)	1 each Required if E-LSD is removed
49557-T6000	Axle Clip		GV70 (JK1) GV80 (JX1)	1 each Required if E-LSD is removed
28751-2S000	Rear Exhaust Gasket (to exhaust muffler)		GV70 (JK1) GV80 (JX1)	2 each Required if E-LSD is removed
00232-19096	TF 0870C E-LSD Synthetic Transfer Case Fluid (16 FL OZ, 473 mL)		GV60 (JW1) GV70 (JK1) GV80 (JX1)	1 bottle Only required if necessary to add fluid into the E-LSD.

Service Procedure:**STUI**

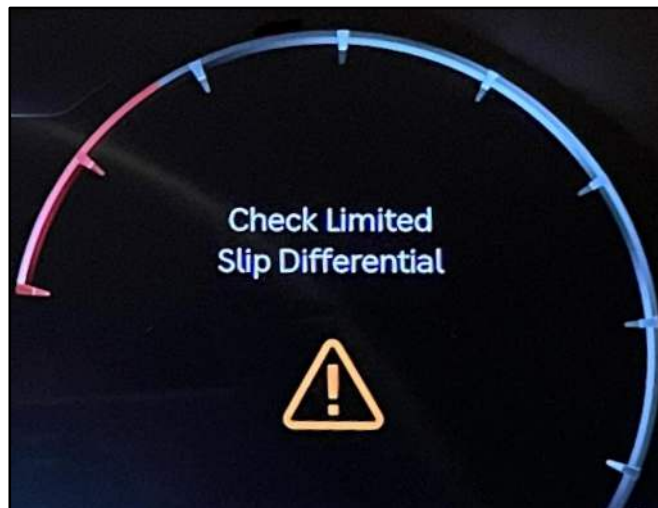
This TSB includes Repair validation photos. Refer to the latest Digital Documentation Policy for requirements.

E-LSD Actuator Replacement

1. Confirm E-LSD warning message, "Check Limited Slip Differential" is displayed in the cluster.

If any of the following DTCs are present, P188213, P188900, or P189600, continue with E-LSD actuator replacement.

If other DTCs are present, follow the shop manual for repairs.

**! WARNING**

For the GV60, **before** removing the E-LSD:

- Be sure to read and follow the "High Voltage Shut-off Procedures" in the shop manual before doing any work related with the high voltage system.
- Refer to the Shop Manual → Electronic Limited Slip Differential System → High Voltage Shut-off Procedures.
- Failure to follow the safety instructions may result in serious electrical injuries.

2. Lift the vehicle to remove the Electronic Limited Slip Differential (E-LSD) (A).

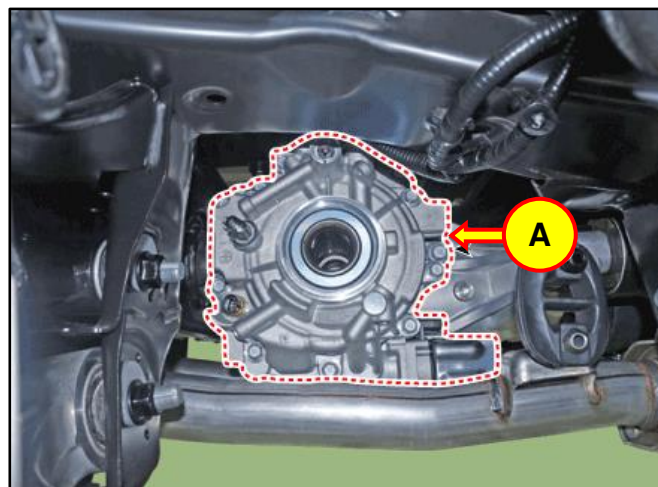
Refer to the applicable shop manual.

Electronic Limited Slip Differential System →
Electronic Limited Slip Differential Assembly →
Electronic Limited Slip Differential (E-LSD) →
Removal and Installation

i Information

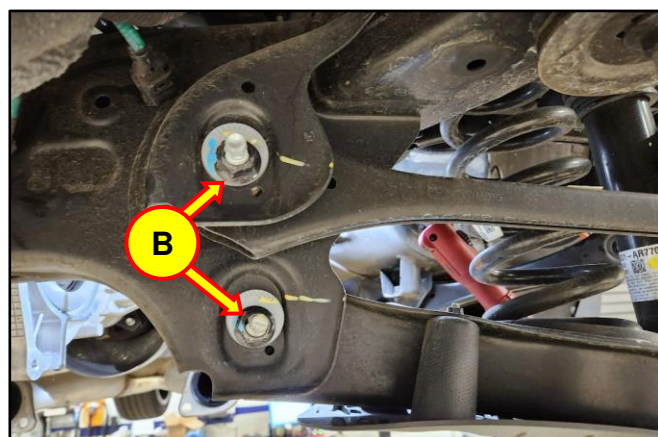
GV60: Only the left hand, driver-side integrated drive axle (IDA) needs to be removed.

GV70 and GV80: Only the right hand, passenger side axle needs to be removed.



i Information

Do not touch the alignment settings (B) for the rear suspension during E-LSD removal.



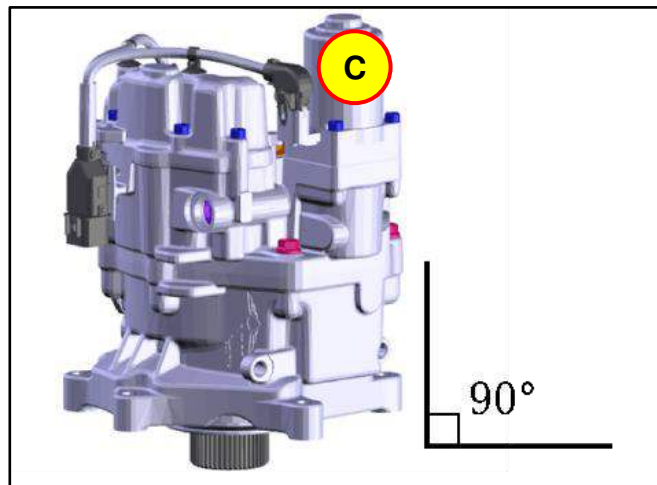
3. **GV60**

Place the E-LSD onto a work bench.

Rotate the E-LSD to point the actuator (C) at a 90-degree angle.

NOTICE

During removal and installation of the actuator, maintain the E-LSD at a 90-degree angle to not spill fluid. Low fluid levels may damage the E-LSD.

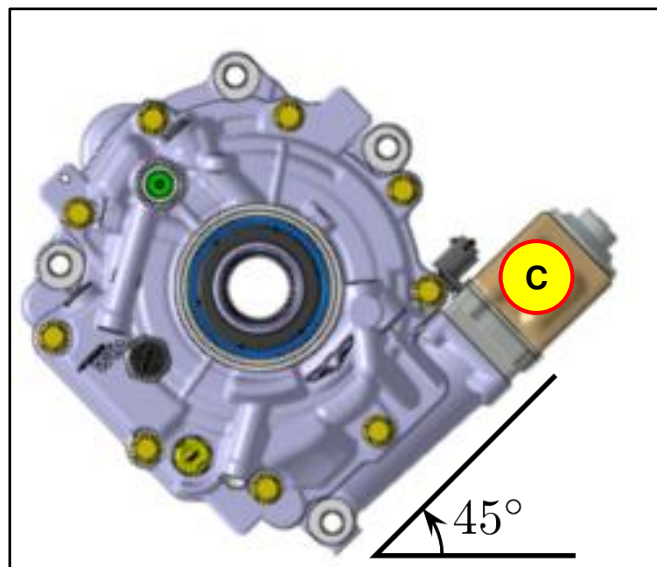
**GV70 and GV80**

Place the E-LSD onto a work bench.

Rotate the E-LSD to point the actuator (C) at a 45-degree angle.

NOTICE

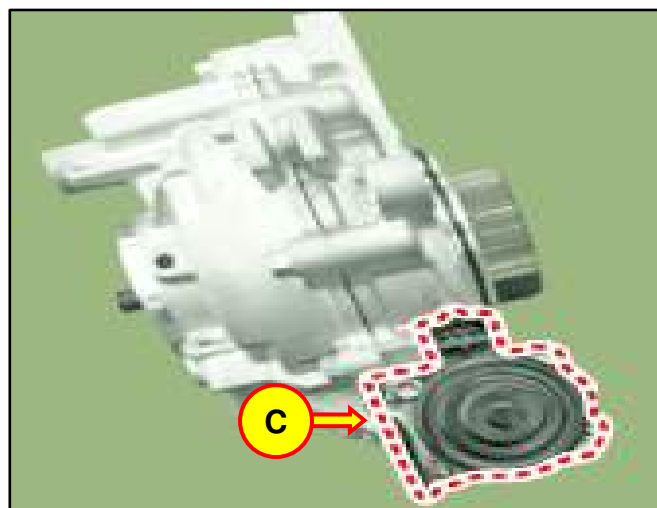
During removal and installation of the actuator, maintain the E-LSD at a 45-degree angle to not spill fluid. Low fluid levels may damage the E-LSD.



4. Leave the E-LSD in this position for at least 10 seconds to allow the fluid to drain from the actuator into the E-LSD.
5. Loosen the bolts and remove the actuator (C).

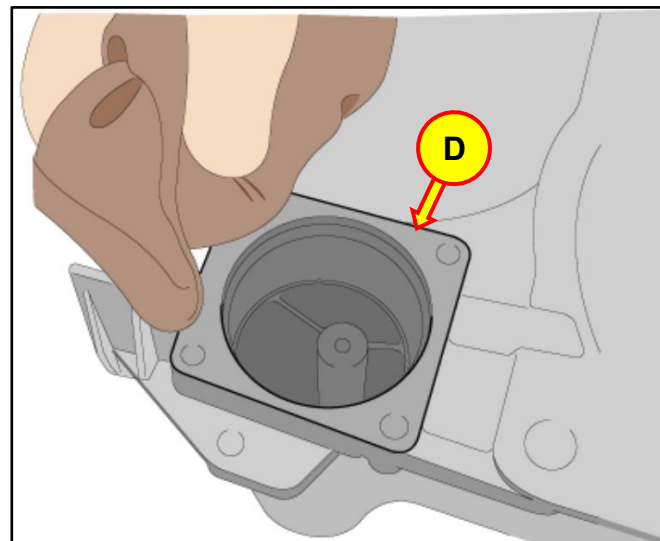
E-LSD Actuator Tightening Torque

lb-ft	8.3
lb-in	100
N.m	11.3



6. Wipe the actuator seating surface (D) with a clean cloth.

Do not allow foreign substances to enter the E-LSD.



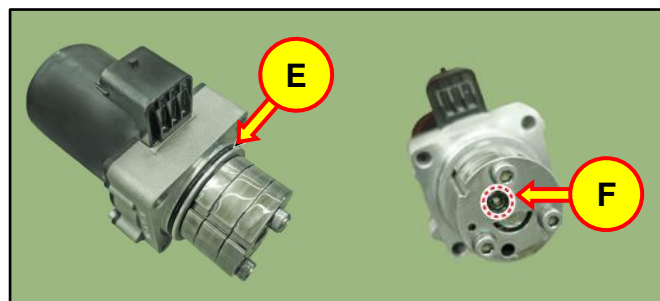
7. Confirm date on the new actuator label.

GV60 (JW1): 06/01/2023 or after

GV70 (JK1) and GV80 (JX1): 05/31/2023 or after



8. Ensure both O-rings (E) and (F) are properly seated on the new actuator.



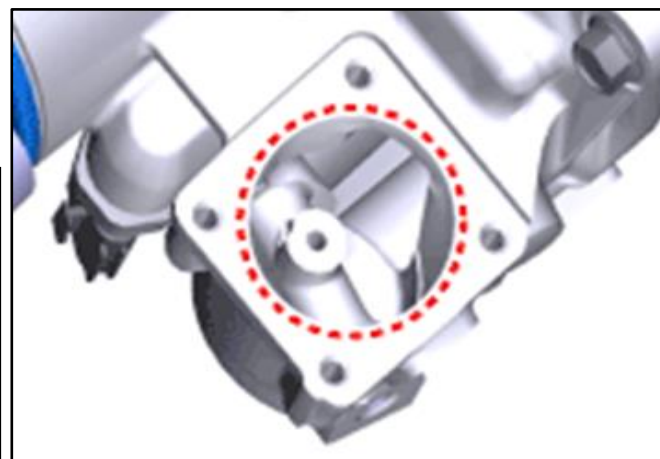
9. If fluid is lost, add fluid for the amount lost into the actuator opening.

NOTICE

Using the wrong fluid specification or low fluid levels may damage the E-LSD.

Fluid Specification: TF 0870C, E-LSD
Synthetic Transfer Case Fluid
Part Number: 00232-19096

E-LSD Fluid Capacity: 395mL - 425mL



10. Install the new actuator.

11. Before reinstalling the E-LSD assembly, take a photo.

STUI

Using STUI, take a clear photo of the installed actuator with the last 6 digits of the VIN and the date of repair on a piece of paper. The manufacture date of the actuator (G) must be clearly visible. See example shown to the right.

Upload the photo to STUI.



12. Install parts in the reverse order of removal.

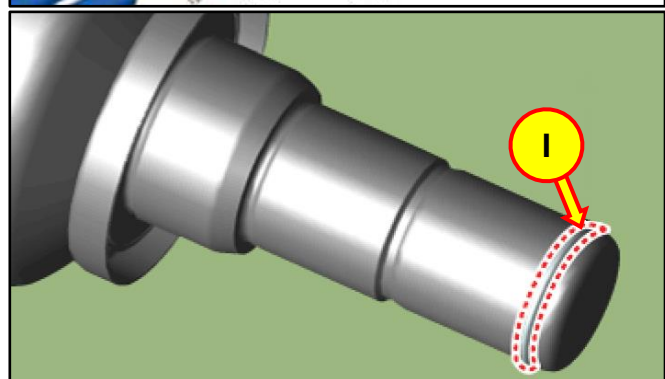
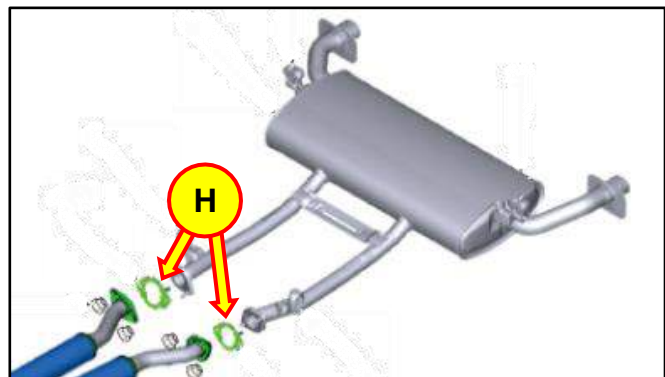
Refer to the applicable shop manual for tightening torque specifications.

NOTICE

The following new parts must be used during reassembly. Use the above Parts Information table, shop manual, and parts catalog to ensure the correct parts are used.

- GV70 (JK1) and GV80 (JX1)
 - Rear exhaust gasket (H) to muffler
 - Axle Castle Nut
- GV70 (JK1), and GV80 (JX1)
 - Axle Clip (I)

Reusing parts will cause the exhaust to leak and the axle to become unseated.



Axle Castle Nut

13. The service procedure is now complete.