



Technical Service Bulletin

GROUP**DRIVESHAFT AND
AXLE****NUMBER****26-DS-001G****DATE****SEPTEMBER 2026****MODEL(S)****SEE BELOW****SUBJECT:****REAR DIFFERENTIAL HUM OR WHINE NOISE
INSPECTION & REPAIR**

This TSB supersedes 24-DS-001G-1 to update G80 (RG3) and GV80 (JX1) Parts Information, GV80 (JX1) Warranty Information, Warranty Notes, G80 (RG3) Differential Fluid specifications in the Service Procedure, and add the GV80 (JX1) E-LSD & Differential Assembly Replacement procedure.

Description: Some GV70 (JK1, JK1A), GV80 (JX1) and G80 (RG3) vehicles may have a hum or whine noise condition from the rear differential at certain speeds. This bulletin describes the procedure to inspect the vehicle for the hum or whine noise and, if necessary, to tighten the rear differential lock nut to specification. If the hum or whine noise remains after tightening the lock nut, then this bulletin provides instructions to replace the rear differential or other driveline components as necessary.

**Applicable Vehicles:**

Model Year	Model	VINs Start with
All	GV70 (JK1)	KMU
	GV70 (JK1A)	5NM
	G80 (RG3)	KMT
	GV80 (JX1)	KMU

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

Parts Information:

i Information

Part numbers might have been added or changed since publishing this TSB. Order part numbers based on VIN. Please refer to the parts catalog for the latest information.

Model	Part Name	Part Number	Part Detail	Remarks
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	Front & Center Muffler Gasket	28751-3J000	2.5T and 3.5T	2.5T: Qty 1
				3.5T: Qty 2
GV70 (JK1, JK1A) GV80 (JX1)	Rear & Center Muffler Gasket	28751-2S000		Qty 2
G80 (RG3)		28751-3S100		
GV70 (JK1, JK1A) GV80 (JX1)	Rear Propeller Shaft Bolts (to transfer case)	49319-T6100		Qty 3
G80 (RG3)		49319-3M000		
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	Rear Propeller Shaft Nuts (to transfer case)	49329-3M000		Qty 3
GV70 (JK1, JK1A) GV80 (JX1)	Rear Propeller Shaft Bolts (to differential)	49319-T6000		Qty 3
G80 (RG3)		49319-T1000		

Parts Information (continued):



Information

- Order the following parts **ONLY** if differential replacement is necessary.
- From 2025MY, some GV80 rear differentials are preassembled with the E-LSD. If the differential needs replacement, replace the E-LSD & Diff Assy.
- Part numbers might have been added or changed since publishing this TSB. Order part numbers based on VIN. Please refer to the parts catalog for the latest information.

Model	Part Name	Part Number	Part Detail	Remarks
GV70 (JK1, JK1A)	Rear Differential Carrier	53000-47520	2.5T, AWD	Qty 1
		53000-4J510	3.5T, AWD	
		53000-4J520	3.5T, AWD, w/ & w/out E-LSD	
GV80 (JX1)		53000-4J600	2.5T, RWD & AWD	
		53000-4J700		
		53000-4J610	3.5T, AWD	
		53000-4J710		
G80 (RG3)		53000-4J630	3.5T, AWD, E-LSD	
		53000-47501	2.5T, RWD	
		53000-47502	2.5T, RWD & AWD	
		53000-47560	2.5T, AWD	
		53000-4J500	3.5T, RWD & AWD	
		53000-4J560		
		53000-4J540	3.5T, AWD, E-LSD	
		53000-4J570		
GV80 (JX1) Some 2025MY+	E-LSD & Diff Assy	47890-4J730	3.5T, AWD, E-LSD	Qty 1
				Order ONLY if differential replacement is required

SUBJECT:**REAR DIFFERENTIAL HUM OR WHINE NOISE INSPECTION & REPAIR**

Model	Part Name	Part Number	Part Detail	Remarks
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	Front & Center Muffler Gasket	28751-3J000	2.5T and 3.5T	2.5T: Qty 1 3.5T: Qty 2
GV70 (JK1, JK1A) GV80 (JX1)	Rear & Center Muffler Gasket	28751-2S000		Qty 2
G80 (RG3)		28751-3S100		
GV70 (JK1, JK1A) GV80 (JX1)	Rear Propeller Shaft Bolts (to transfer case)	49319-T6100		Qty 3
G80 (RG3)		49319-3M000		
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	Rear Propeller Shaft Nuts (to transfer case)	49329-3M000		Qty 3
GV70 (JK1, JK1A) GV80 (JX1)	Rear Propeller Shaft Bolts (to differential)	49319-T6000		Qty 3
G80 (RG3)		49319-T1000		
GV70 (JK1, JK1A)	Axle Clip	49557-3M000	2.5T, w/out E-LSD	Qty 2
		49557-2G000	3.5T, w/out E-LSD	
		49557-T6000	3.5T w/ E-LSD	
GV80 (JX1)		49557-2G000	2.5T and 3.5T w/out E-LSD	
		49557-T6000	2.5T and 3.5T w/ E-LSD	
G80 (RG3)		49557-3M000	2.5T	
		49557-2G000	3.5T	
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	Axle Castle Lock Nut	49551-4T000	2.5T and 3.5T	Qty 2
GV70 (JK1, JK1A) GV80 (JX1), 2025MY+ G80 (RG3)	Gear Oil, 75W-85, GL-5, LSD*	00232-19075		Qty 2 qts
2021 – 2024MY G80 (RG3)	Gear Oil, 75W-85, GL-5, Non LSD	00232-19097		Qty 2 qts

***NOTE:** LSD gear oil designates the specification, **NOT** if the vehicle is equipped with an E-LSD.

Warranty Information:

Model	Op. Code	Operation	Op. Time	Causal Part	Nature Code	Cause Code
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	53000F08	Rear Differential Carrier Noise Inspection	0.4 M/H	53000*	Q26	ZZ1
	53000F09	Rear Differential Carrier Noise Inspection, Lock Nut Tightening, and Noise Reinspection	1.9 M/H			
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	53000F10	Rear Differential Carrier Noise Inspection, Lock Nut Tightening (when overtightened), Replacement (without E-LSD), and Alignment	4.7 M/H			
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	53000F11	Rear Differential Carrier Noise Inspection, Lock Nut Tightening (when overtightened), Replacement (with E-LSD) and Alignment	4.8 M/H			
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	53000F12	Rear Differential Carrier Noise Inspection, Lock Nut Tightening, Noise Reinspection, Replacement (without E-LSD), and Alignment	6.1 M/H			
GV70 (JK1, JK1A) GV80 (JX1) G80 (RG3)	53000F13	Rear Differential Carrier Noise Inspection, Lock Nut Tightening, Noise Reinspection, Replacement (with E-LSD), and Alignment	6.2 M/H			

NOTE 1: Normal warranty applies.

NOTE 2: Submit a "Warranty" claim on the "Claim Entry/Edit/Submit" screen on WebDCS and attach all required Digital Documentation per TSB to the claim.

NOTE 3: This TSB includes repair validation photos.

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 any part(s) not subject to this TSB are found in need of replacement while performing the repair procedure, and the affected part(s) are still under warranty, the dealer may submit a separate claim using the same repair order. If the part(s) not subject to this TSB are out of warranty coverage, the dealer has the option to submit a PA Request for goodwill consideration on a case-by-case basis.

***NOTE 6:** Refer to applicable parts catalog for full causal part numbers.

Service Procedure:**DIGITAL DOCUMENTATION**

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

NOTICE

Applying the recommended torque to all fasteners is essential to reduce potential issues from occurring after the service procedure.

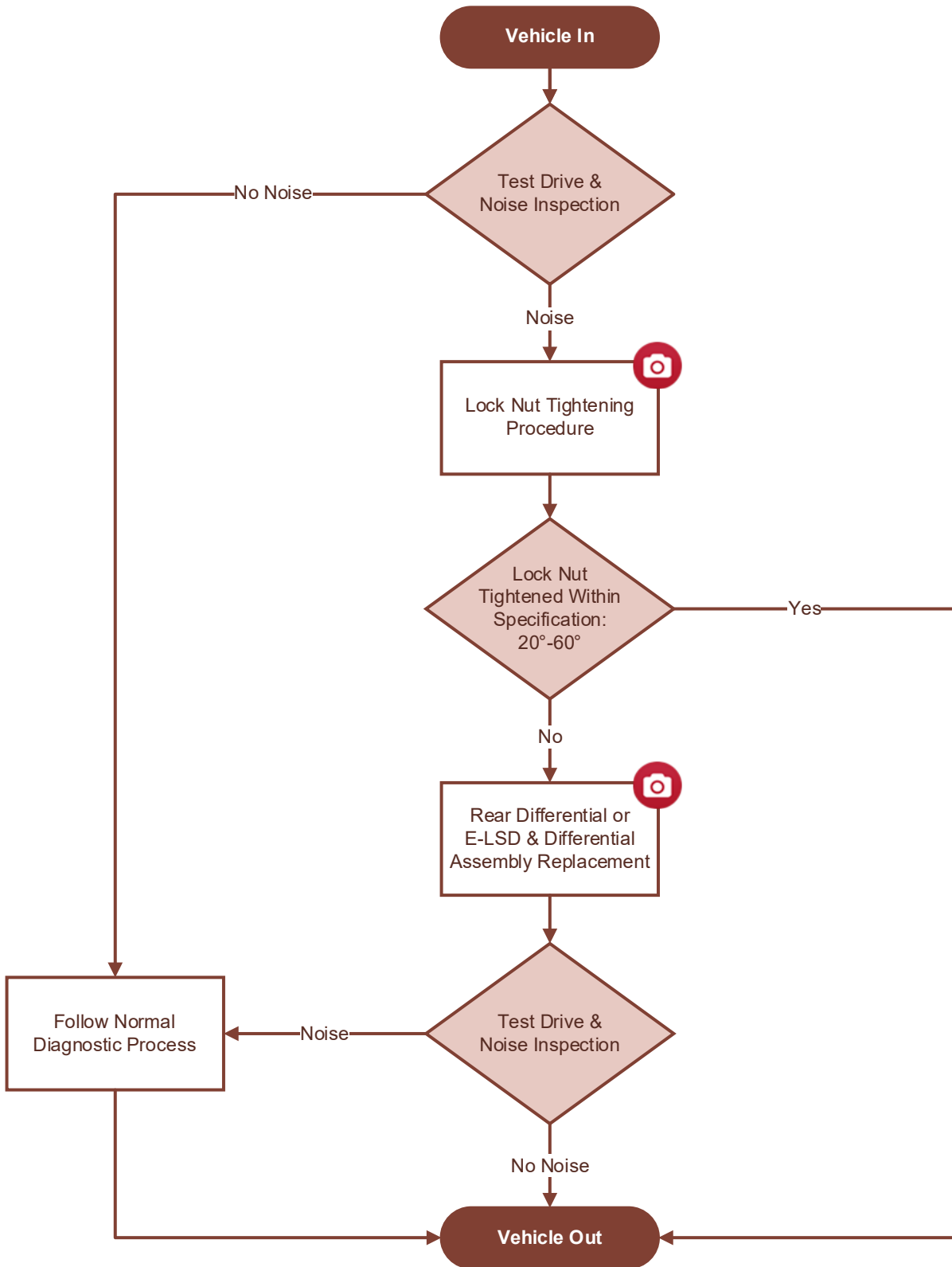
NOTICE

- Replacing the rear differential **BEFORE** attempting the lock nut tightening procedure may result in a warranty charge back.
- Diagnose and repair other components if the noise does not fall within the specified differential noise conditions.
- Do **NOT** tighten the lock nut on a new differential.

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Flowchart



Rear Differential Noise Inspection

1. Drive the vehicle on the road to inspect for rear differential noise.
 - **GV70 (JK1, JK1A):** Hum or whine noise typically occurs in the speed range of **37 - 70 mph** (approx. **60 - 110 km/h**)
 - To confirm the noise is from the rear differential, drive at approximately **52 mph** and gently depress the accelerator pedal then release the pedal to coast. Repeat this a few times. The humming/whining noise will be most apparent when depressing and releasing the pedal.
 - **GV80 (JX1) and G80 (RG3):** Hum or whine noise typically occurs in the speed range of **25 - 50 mph** (approx. **80 - 40 km/h**)
 - To confirm the noise is from the rear differential, drive at approximately **35 mph** and gently depress the accelerator pedal then release the pedal to coast. Repeat this a few times. The humming/whining noise will be most apparent when depressing and releasing the pedal.

i Information

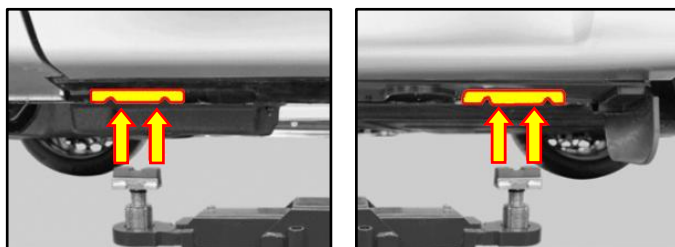
- The noise does **NOT** have to occur during the entire speed range.
 - Do **NOT** test the vehicle for noise on the lift. The vehicle must be driven on the road to accurately assess differential noise.
 - For an optimal evaluation, ensure a person sits in the rear seat during the test drive to identify the noise source.
 - If the noise is **NOT** from the rear of the vehicle, then the rear differential may not be the source. Determine where noise is coming from and proceed with diagnosis and repair for that noise.
2.
 - If noise is heard as described above, continue to the [Rear Differential Lock Nut Tightening](#) procedure below.
 - If the noise as described above is **NOT** heard, then the service procedure is now complete.
 - If noises are heard from other areas of the vehicle, then follow the normal diagnostic process.

Rear Differential Lock Nut Tightening

1. Visually check that the lift blocks are properly seated on the vehicle support points and slightly raise the vehicle until the tires are no longer touching the ground.

NOTICE

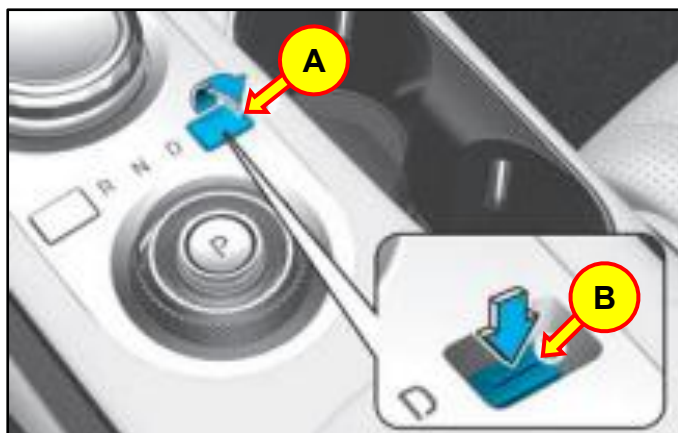
Raising the vehicle from anywhere other than the support points may damage vehicle components.



Refer to the shop manual:

- **General Information > Lift and Support Points > General Information**

2. Within **3 minutes** of turning **OFF** the vehicle's engine, place the transmission into neutral as described below.
 - Remove the cap-cover (A) on the center console.
 - Press the button (B) under the cap cover while depressing the brake pedal until the transmission shifts into neutral. The button **MUST** be pressed within **3 minutes** after the engine is turned **OFF**.

**Information**

If neutral is selected while the engine is running, the transmission will **NOT** remain in neutral when the vehicle is turned **OFF**.

3. If the vehicle is equipped with an E-LSD, use the GDS **Brake Pad Change Mode** to release the parking brake.

To access the **Brake Pad Change Mode**, refer to the shop manual:

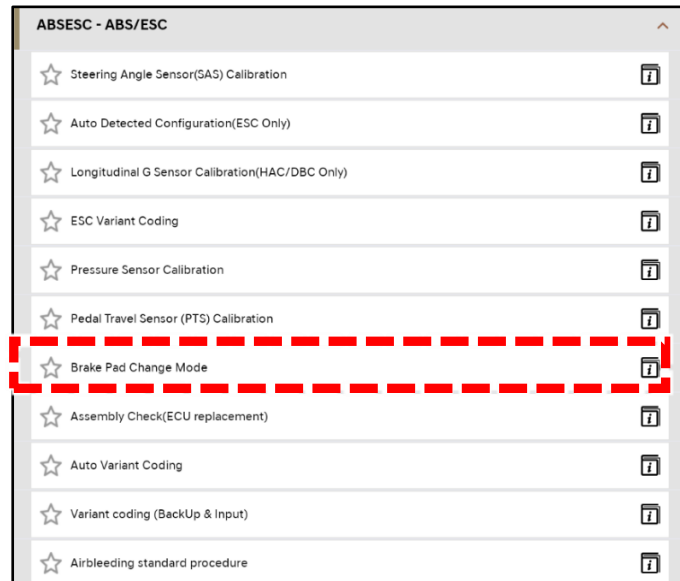
- **GV70 (JK1, JK1A):**
Brake System > Brake System > Parking Brake System > Electronic Parking Brake (EPB) > Adjustment
- **GV80 (JX1) and G80 (RG3):**
Brake System > Brake System > Rear Disc Brake > Repair procedures

After releasing the parking brake, disconnect the 12V negative (–) battery terminal and the EPB actuator connector after completing the function.

If the vehicle is **NOT** equipped with an E-LSD, proceed to **step 4**.

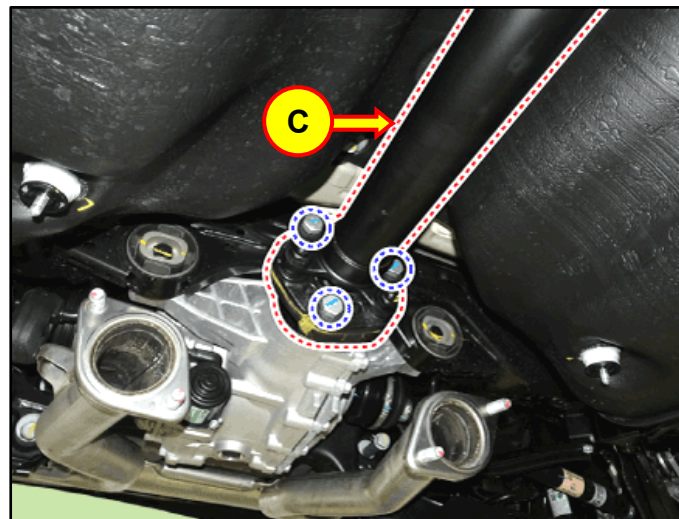
For E-LSD equipped vehicles:

Shift the transmission into neutral and release the EPB. This is necessary to turn the propeller shaft for easier access to the bolts.



4. Remove the rear propeller shaft (C) to access the rear differential lock nut by referring to the shop manual:

- **Driveshaft and Axle > Propeller Shaft Assembly > Propeller Shaft > Removal**

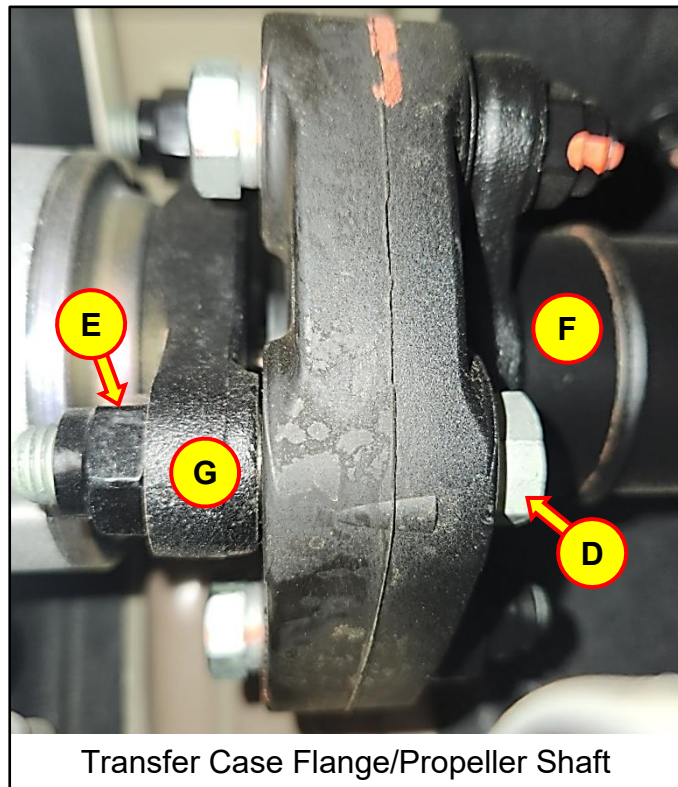


5. Note the direction of the bolts (D), washers (RG3 only), and nuts (E) **BEFORE** removing the propeller shaft (F) from the transfer case/transmission and rear differential flange (G).

Propeller Shaft to Flange*
Tightening Torque:

lb-ft	73
N.m	99

*Transfer case/transmission and rear differential flanges



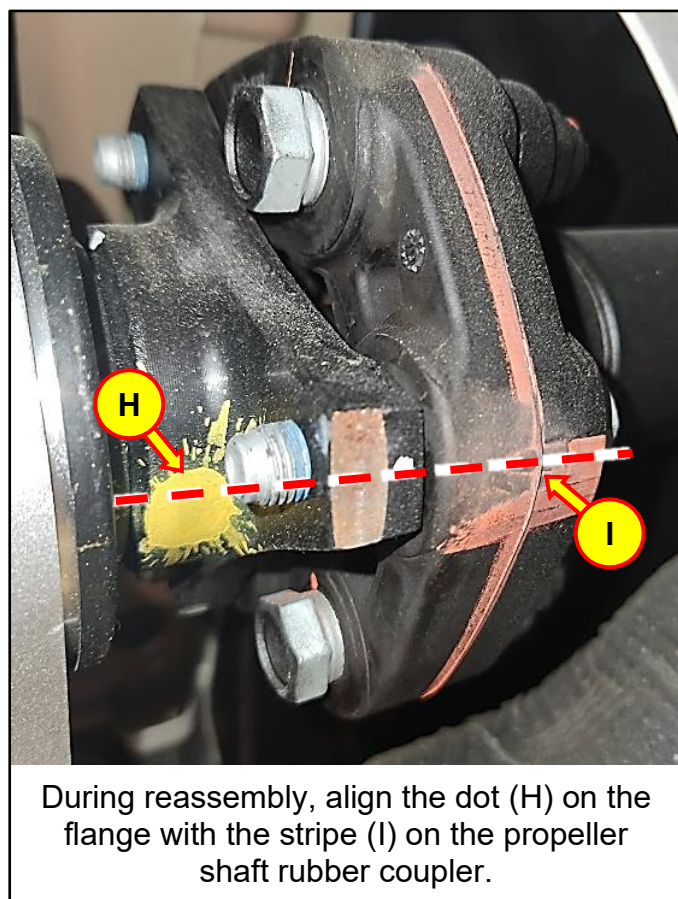
Transfer Case Flange/Propeller Shaft

6. Note the alignment of the yellow dot (H) on the transfer case/transmission and rear differential flange and the red stripe (I) on the propeller shaft rubber coupling.

If the dot or the stripe are **NOT** visible, create similar markings **BEFORE** disassembly to ensure the position of the propeller shaft to the flanges during reassembly.

NOTICE

- Installing the bolts, washers (RG3 only), and nuts differently from the initial state or changing the position of the propeller shaft relative to the flange can result in an unbalanced propeller shaft causing a vibration at high speed.
- Properly support the entire length of the propeller shaft after it is removed, i.e., place it on level ground.
- Do **NOT** reuse the bolts and nuts during reinstallation of the propeller shaft to the flanges.



During reassembly, align the dot (H) on the flange with the stripe (I) on the propeller shaft rubber coupler.

7.

**DIGITAL
DOCUMENTATION**

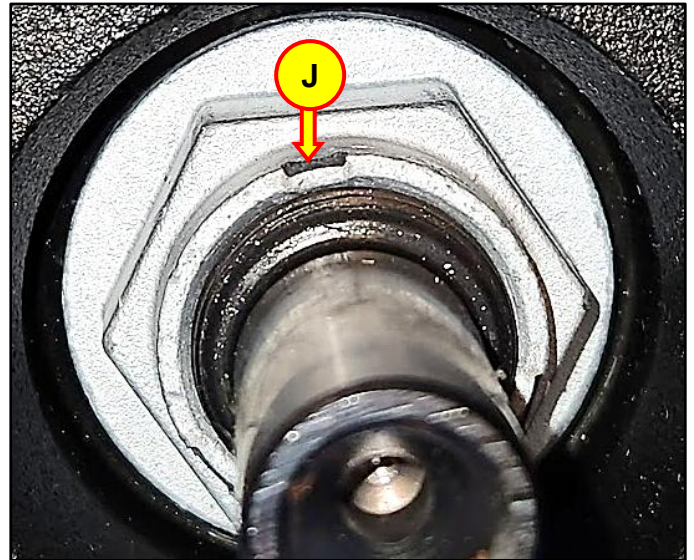
Using the STUI camera function, take a photo of the rear differential lock nut **AFTER** removal of the propeller shaft, and **BEFORE** tightening the lock nut.

Upload the photo to STUI.

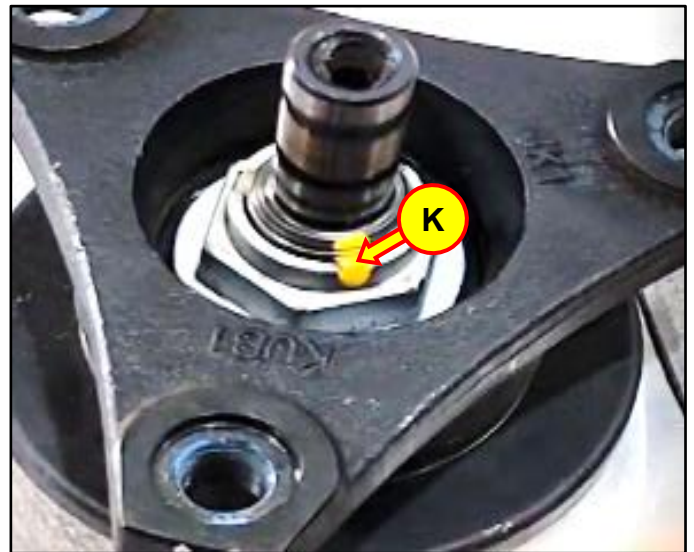
NOTE: If the STUI camera function is **NOT** used, write the last 6 digits of the VIN and date of repair on a piece of paper to include in the photo.



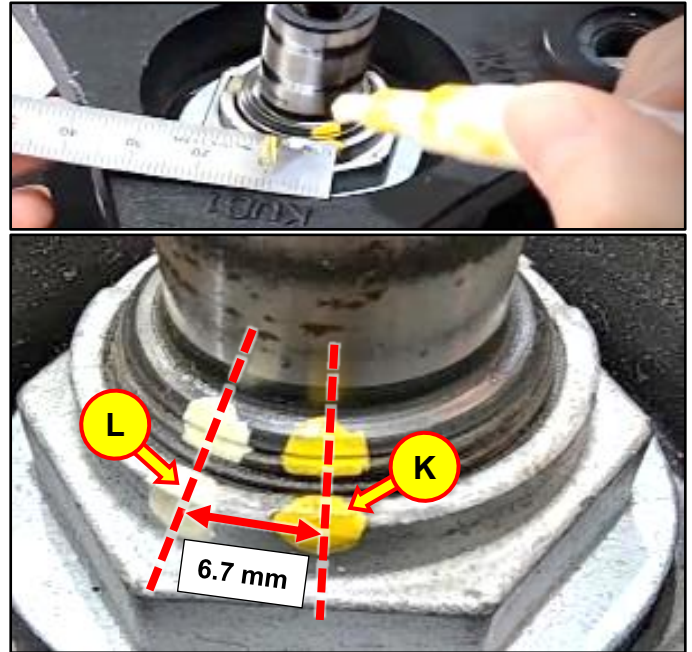
8. Locate the stake (J) on the lock nut in the differential flange.



9. Mark a line (K) on the located stake up to the threads on the shaft.



10. Mark a second line (L) that is **6.7 mm** to the left of the first (K).



11. Tighten the lock nut using a **1/2-inch impact wrench** with a **30 mm** deep socket.

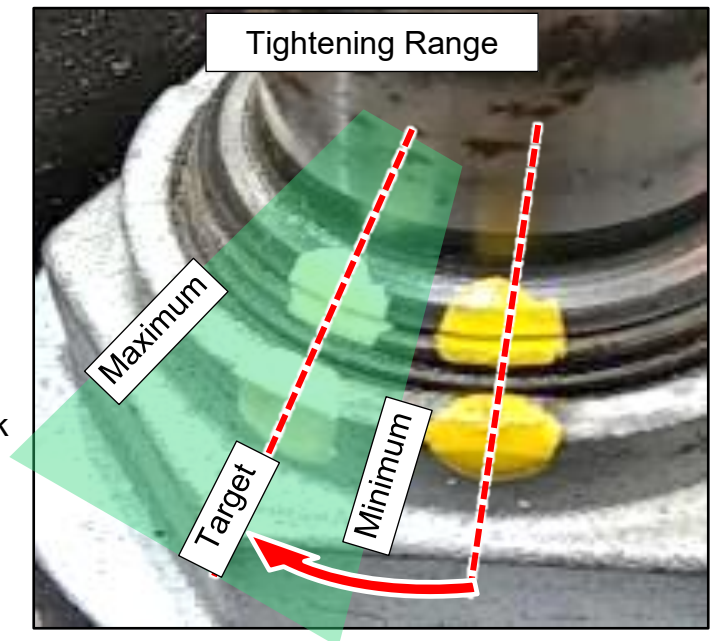
i Information

The **1/2-inch impact wrench** must provide enough torque to turn the lock nut.

Tighten the lock nut incrementally. Check the movement of the mark every **1-2 seconds**. **STOP** when the nut reaches the **6.7 mm** mark or **30°** of rotation.

Tightening Range:

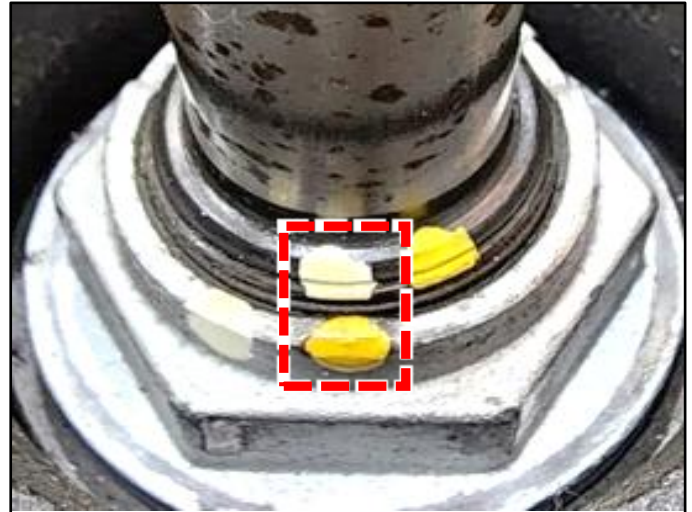
- Target: **6.7 mm, 30°**
- Minimum: **4.5 mm, 20°**
- Maximum: **13.3 mm, 60°**



NOTICE

- Ensure the impact wrench is in the tightening, clockwise direction.
- Do **NOT** tighten the nut beyond **60° of rotation**. If the nut is overtightened, replace the differential.
- Do **NOT** loosen the nut and attempt to retighten the nut. If the nut is loosened, the differential must be replaced.
- If the nut does **NOT** reach at least **20°** of rotation, replace the differential.

If differential replacement is necessary, proceed to the [Rear Differential Replacement](#) procedure.



Alignment of the 2 marks indicates the nut is tightened to the target **30°**.

12.

DIGITAL DOCUMENTATION

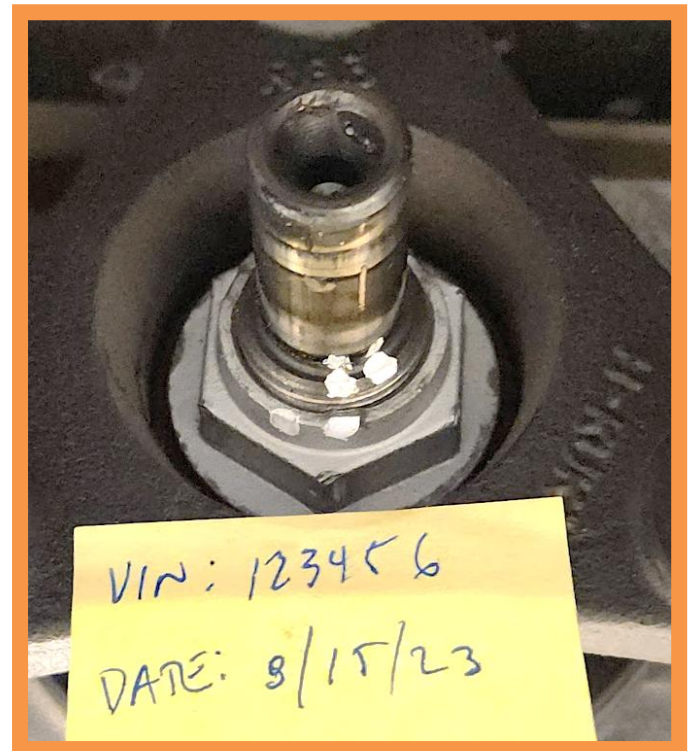
Using the STUI camera function, take a photo **AFTER** tightening the lock nut with the marks clearly visible.

Upload the photo to STUI.

NOTE: If the STUI camera function is **NOT** used, write the last 6 digits of the VIN and date of repair on a piece of paper to include in the photo.

i Information

A photo is required regardless of the nut tightening angle.



13. Install parts in the reverse order of the removal process.

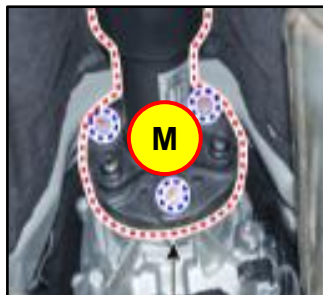
Refer to the applicable shop manual for tightening torque specifications.

NOTICE

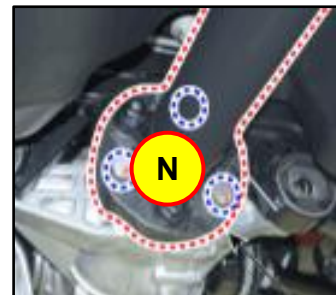
Use **NEW** parts for the items listed below during reassembly. Refer to the **Parts Information** table in this TSB, shop manual, and parts catalog to ensure the correct parts are used:

- Propeller shaft bolts (M) (to transmission/transfer case)
- Propeller shaft nuts (M) (to transmission/transfer case)
- Propeller shaft bolts (N) (to differential)
- Front exhaust gasket (O) (to catalyst)
- Rear exhaust gasket (P) (to exhaust muffler)

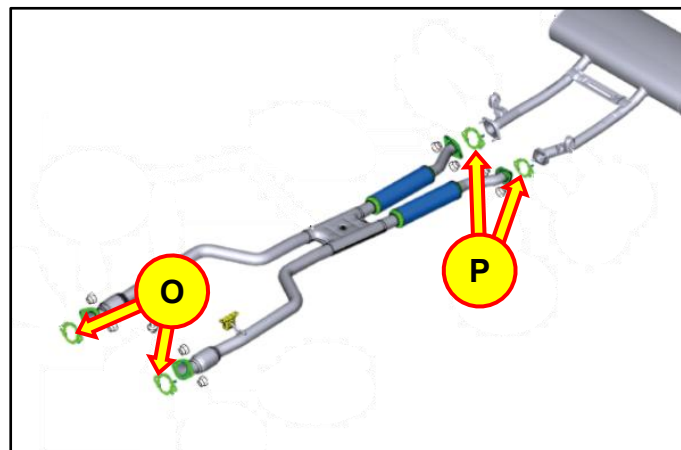
Reusing parts will **NOT** provide the correct clamping force and can cause the exhaust to leak.



Propeller shaft to transmission/transfer case



Propeller shaft to rear differential



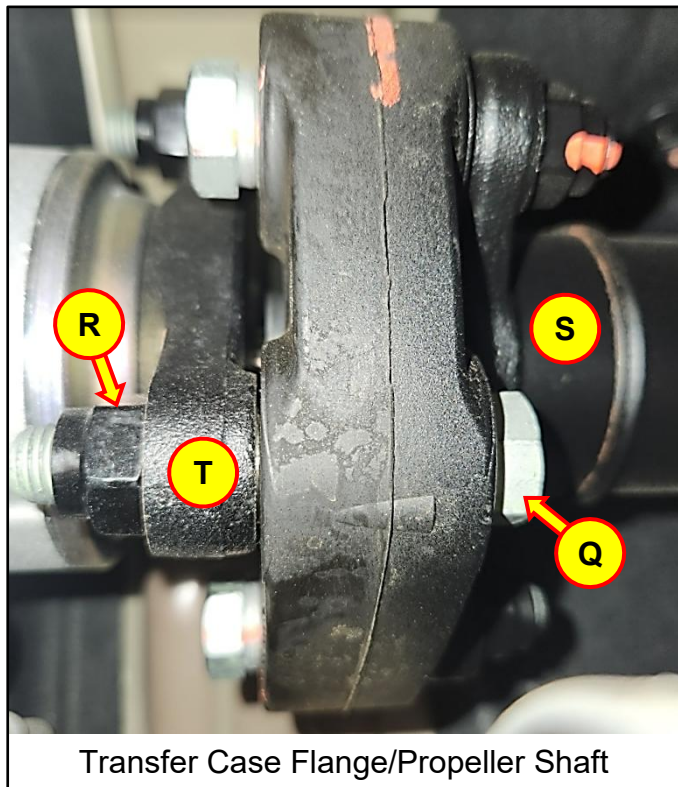
14. Ensure proper propeller shaft alignment and fastener locations:

- Bolts (Q)
- Washers (RG3 only)
- Nuts (R)
- Propeller shaft (S)
- Rear differential flange (T)

Propeller Shaft to Flange*
Tightening Torque:

lb-ft	73
N.m	99

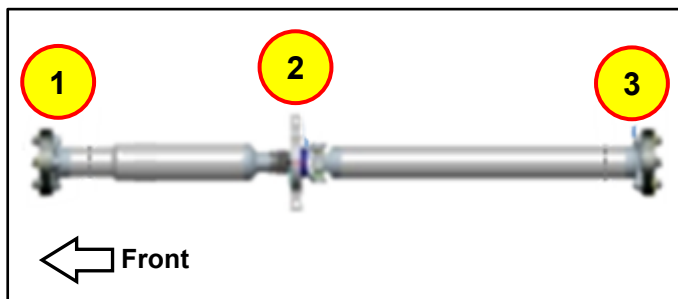
*Transfer case/transmission and rear differential flanges



Transfer Case Flange/Propeller Shaft

15. Install the propeller shaft in the following order:

1. Flange to transmission/transfer case
2. Center bearing bracket
3. Flange to rear differential



16. After reassembly, drive the vehicle on the road to inspect for rear differential noise.
- **GV70 (JK1, JK1A):** Hum or whine noise typically occurs in the speed range of **37 - 70 mph** (approx. **60 - 110 km/h**)
 - To confirm the noise is from the rear differential, drive at approximately **52 mph** and gently depress the accelerator pedal then release the pedal to coast. Repeat this a few times. The humming/whining noise will be most apparent when depressing and releasing the pedal.
 - **GV80 (JX1) and G80 (RG3):** Hum or whine noise typically occurs in the speed range of **25 - 50 mph** (approx. **80 - 40 km/h**)
 - To confirm the noise is from the rear differential, drive at approximately **35 mph** and gently depress the accelerator pedal then release the pedal to coast. Repeat this a few times. The humming/whining noise will be most apparent when depressing and releasing the pedal.

**Information**

- The noise does **NOT** have to occur during the entire speed range.
- Do **NOT** test the vehicle for noise on the lift. The vehicle must be driven to accurately assess differential noise.
- For an optimal evaluation, ensure a person sits in the rear seat during the test drive to identify the noise source.
- If the noise is **NOT** from the rear of the vehicle, then the rear differential may **NOT** be the source. Determine where noise is coming from and proceed with diagnosis and repair for that noise.

- 17.
- If the noise described above is heard, replace the differential. Proceed to the [Rear Differential Replacement](#) procedure.
 - If the noise as described above is **NOT** heard, the service procedure is now complete.
 - If other noises are heard from other areas of the vehicle, then follow the normal diagnostic process.

Rear Differential Replacement

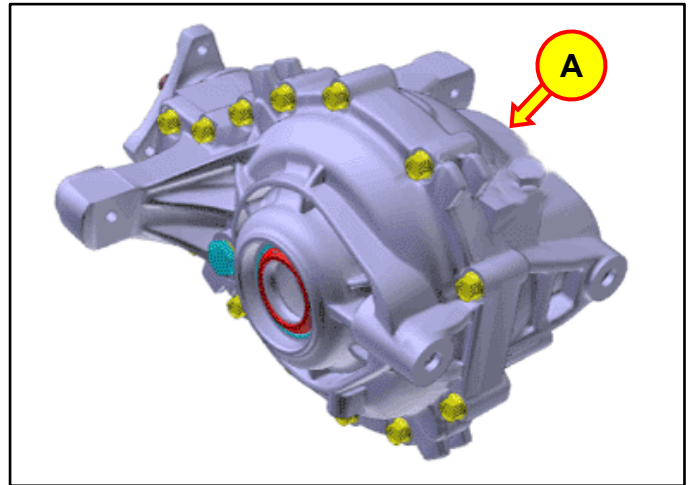
i Information

For 2025MY & later GV80 (JX1) vehicles with an E-LSD & Differential Assembly follow the procedure starting on page 23.

1. Follow **steps 1 - 5** in the [Rear Differential Lock Nut Tightening](#) procedure to remove the propeller shaft again.
2. Remove the rear differential (A) by referring to the shop manual:
 - Driveshaft and Axle > Differential Carrier Assembly > Rear Differential Carrier

If the vehicle is equipped with an E-LSD, remove it **BEFORE** removing the differential by referring to the shop manual:

- Electronic Limited Slip Differential System > Electronic Limited Slip Differential (E-LSD)



3.

DIGITAL DOCUMENTATION

Using the STUI camera function, take a photo of the new rear differential next to the original removed differential with both differential labels visible.

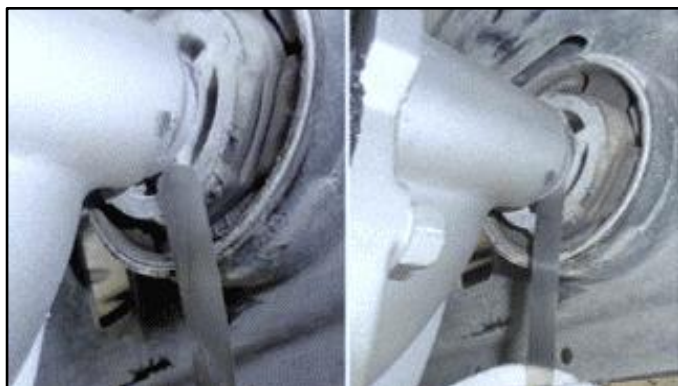
Upload the photo to STUI.

NOTE: If the STUI camera function is **NOT** used, write the last 6 digits of the VIN and date of repair on a piece of paper to include in the photo.



4. Install the new rear differential by referring to the shop manual:
 - **Driveshaft and Axle > Differential Carrier Assembly > Rear Differential Carrier**
5. After installing the rear differential carrier, use a feeler gauge to ensure there is a gap of less than **0.04 mm** between the rear differential carrier cover and the bushing protrusion.

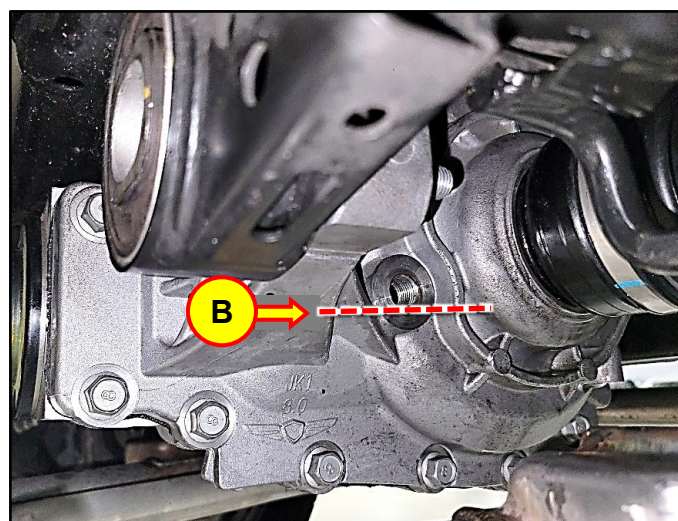
If the gap is larger than **0.04 mm**, the differential carrier and the bushing may **NOT** be aligned properly. Loosen the bolts to align the differential, then torque the bolts to specification.



6. Fill the differential with gear oil until it reaches the fill port (B).

Model	Capacity	Type
GV70 (JK1, JK1A)	1.2 +/- 0.05 L (1.27 +/- 0.05 qt)	75W-85 LSD* P/N: 00232-19075
GV80 (JX1)	1.3 +/- 0.05 L (1.37 +/- 0.05 qt)	
2021 – 2024MY G80 (RG3)	1.2 +/- 0.05 L (1.27 +/- 0.05 qt)	75W-85 Non LSD P/N: 00232-19097
2025MY+ G80 (RG3)	1.2 +/- 0.05 L (1.27 +/- 0.05 qt)	75W-85 LSD* P/N: 00232-19075

*LSD gear oil designates the specification, **NOT** if the vehicle is equipped with an E-LSD.



NOTICE

- New differentials from the Parts Distribution Center (PDC) are **NOT** filled with gear oil.
- Be sure to fill the new differential with gear oil until it reaches the fill port.
- Failure to fill the differential with gear oil will damage the differential and may result in a warranty chargeback.

7. Install parts in the reverse order of the removal process.

Refer to the applicable shop manual for tightening torque specifications.

NOTICE

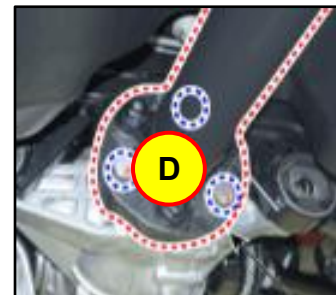
Install **NEW** parts for the items listed below during reassembly. Refer to the **Parts Information** table in this TSB, the shop manual, and the parts catalog to ensure the correct parts are used:

- Propeller Shaft Bolts (C)
(to transmission/ transfer case)
- Propeller Shaft Nuts (C)
(to transmission/ transfer case)
- Propeller Shaft Bolts (D)
(to differential)
- Front Exhaust Gasket (E) (to catalyst)
- Rear Exhaust Gasket (F)
(to exhaust muffler)
- Axle Clips (G)
- Castle Lock Nuts (H)

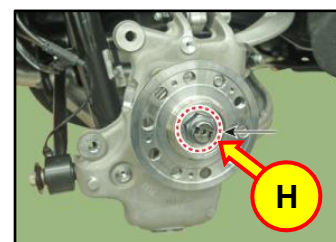
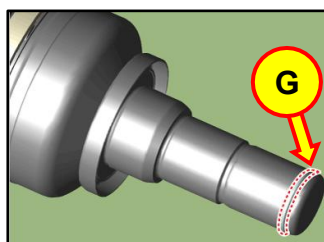
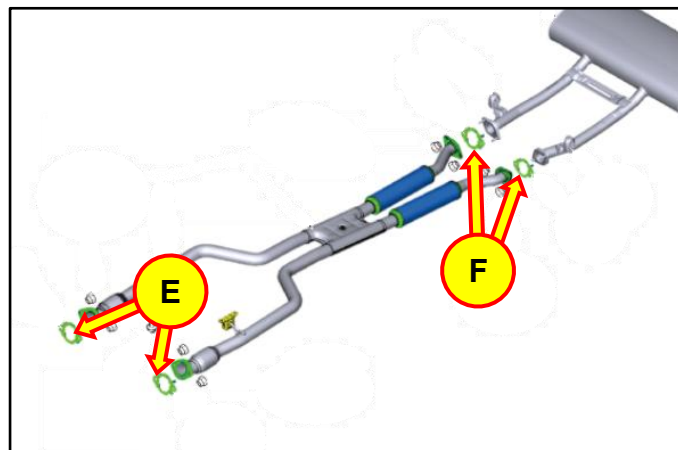
Reusing parts will **NOT** provide the correct clamping force and can cause the exhaust to leak.



Propeller shaft to
transmission/
transfer case



Propeller shaft to rear
differential

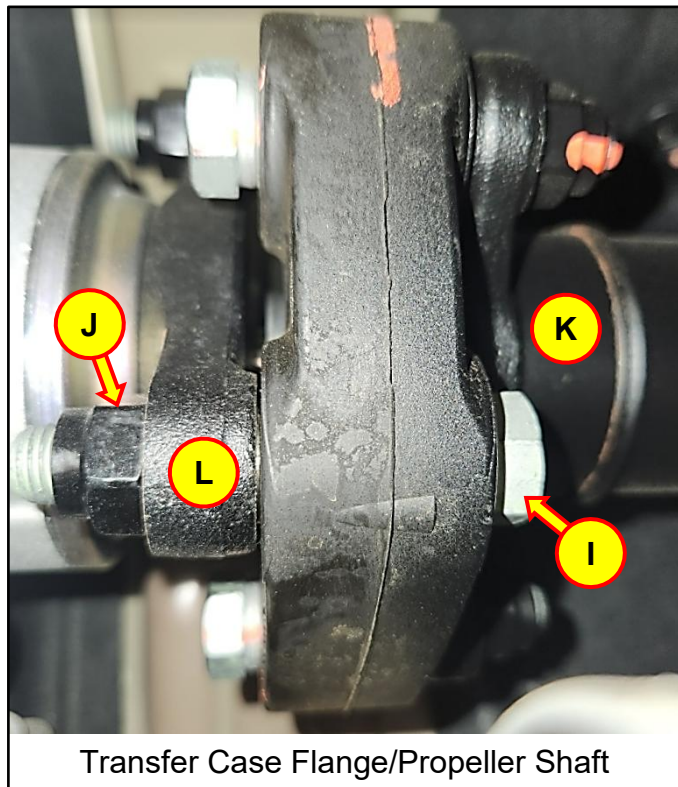


8. Ensure proper propeller shaft alignment and fastener locations:
- Bolts (I)
 - Washers (RG3 only)
 - Nuts (J)
 - Propeller shaft (K)
 - Rear differential flange (L)

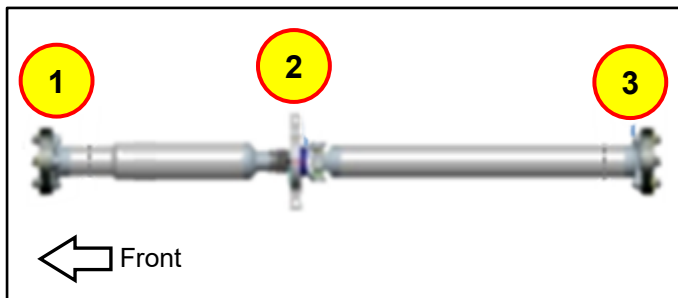
Propeller Shaft to Flange*
Tightening Torque:

lb-ft	73
N.m	99

*Transfer case/transmission and rear differential flanges



9. Install the propeller shaft in the following order:
1. Flange to transmission/transfer case
 2. Center bearing bracket
 3. Flange to rear differential



10. Perform a suspension alignment on an alignment rack by referring to the shop manual:
- **Suspension System > Tires/Wheels > Alignment**

11. After reassembly, drive the vehicle on the road to inspect for rear differential noise.
- **GV70 (JK1, JK1A):** Hum or whine noise typically occurs in the speed range of **37 - 70 mph** (approx. **60 - 110 km/h**)
 - To confirm the noise is from the rear differential, drive at approximately **52 mph** and gently depress the accelerator pedal then release the pedal to coast. Repeat this a few times. The humming/whining noise will be most apparent when depressing and releasing the pedal.
 - **GV 80 (JX1) and G80 (RG3):** Hum or whine noise typically occurs in the speed range of **25 - 50 mph** (approx. **80 - 40 km/h**)
 - To confirm the noise is from the rear differential, drive at approximately **35 mph** and gently depress the accelerator pedal then release the pedal to coast. Repeat this a few times. The humming/whining noise will be most apparent when depressing and releasing the pedal.

**Information**

- The noise does **NOT** have to occur during the entire speed range.
- Do **NOT** test the vehicle for noise on the lift. The vehicle must be driven to accurately assess differential noise.
- For an optimal evaluation, ensure a person sits in the rear seat during the test drive to identify the noise source.
- If the noise is **NOT** from the rear of the vehicle, then the rear differential may **NOT** be the source. Determine where noise is coming from and proceed with diagnosis and repair for that noise.

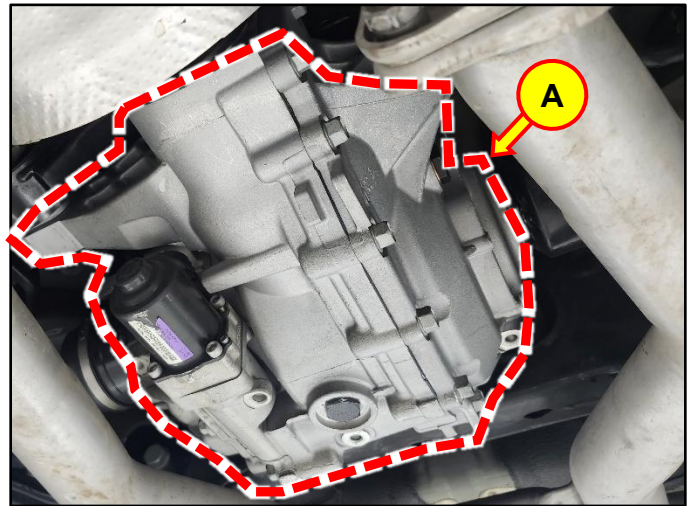
- 12.
- If the noise as described above is **NOT** heard, the service procedure is now complete.
 - If other noises are heard from other areas of the vehicle, then follow the normal diagnostic process.

NOTICE

Do **NOT** tighten the lock nut on a new differential.

E-LSD & Differential Assembly Replacement (2025MY+ GV80 ONLY)

1. Follow **steps 1 - 5** in the [Rear Differential Lock Nut Tightening](#) procedure to remove the propeller shaft again.
2. Remove the E-LSD & Differential Assy (A) as one unit by referring to the shop manual:
 - **Electronic Limited Slip Differential System > Electronic Limited Slip Differential Assembly > Electronic Limited Slip Differential (E-LSD)**
 - **Driveshaft and Axle > Differential Carrier Assembly > Rear Differential Carrier**
 - **Driveshaft and Axle > Rear Driveshaft Assembly > Rear Driveshaft**



3.

DIGITAL DOCUMENTATION

Using the STUI camera function, take a photo of the new E-LSD & Differential Assy next to the original removed E-LSD & Differential Assy with both differential labels visible.

Upload the photo to STUI.

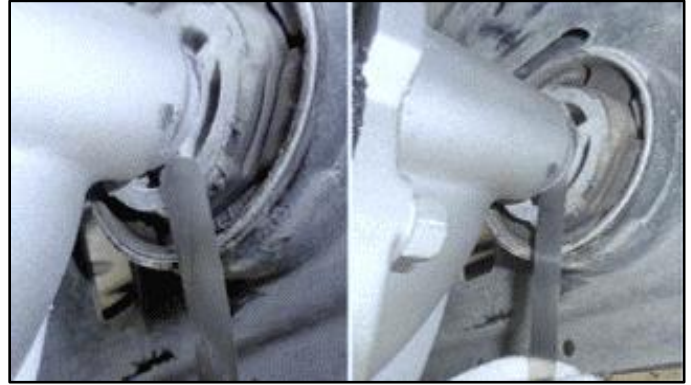
NOTE: If the STUI camera function is **NOT** used, write the last 6 digits of the VIN and date of repair on a piece of paper to include in the photo.



4. Install the new E-LSD & Differential Assy in the reverse order of removal.

5. After installing the rear differential carrier, use a feeler gauge to ensure there is a gap of less than **0.04 mm** between the rear differential carrier cover and the bushing protrusion.

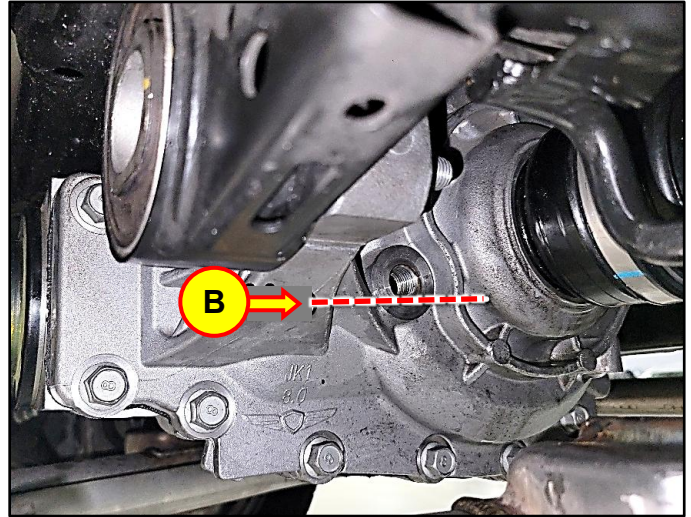
If the gap is larger than **0.04 mm**, the differential carrier and the bushing may **NOT** be aligned properly. Loosen the bolts to align the differential, then torque the bolts to specification.



6. Fill the E-LSD and differential with the specific fluid until it reaches the fill port (B).

Model	Capacity	Type
E-LSD	.410 +/- 0.015 L (0.435 +/- 0.015 qt)	TF 0870C P/N: 00232-19096
Differential	1.3 +/- 0.05 L (1.37 +/- 0.05 qt)	75W-85 LSD* P/N: 00232-19075

*LSD gear oil designates the specification, **NOT** if the vehicle is equipped with an E-LSD.



NOTICE

- New E-LSD & Differentials from the Parts Distribution Center (PDC) are **NOT** filled with gear oil.
- Be sure to fill with gear oil until it reaches the fill port.
- Failure to fill the differential with gear oil will damage the differential and may result in a warranty chargeback.

7. Install parts in the reverse order of the removal process.

Refer to the applicable shop manual for tightening torque specifications.

NOTICE

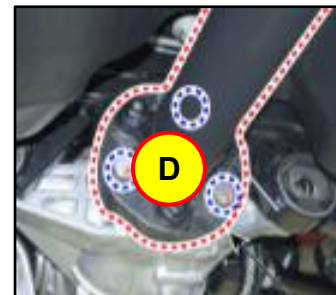
Install **NEW** parts for the items listed below during reassembly. Refer to the **Parts Information** table in this TSB, the shop manual, and the parts catalog to ensure the correct parts are used:

- Propeller Shaft Bolts (C)
(to transmission/ transfer case)
- Propeller Shaft Nuts (C)
(to transmission/ transfer case)
- Propeller Shaft Bolts (D)
(to differential)
- Front Exhaust Gasket (E) (to catalyst)
- Rear Exhaust Gasket (F)
(to exhaust muffler)
- Axle Clips (G)
- Castle Lock Nuts (H)

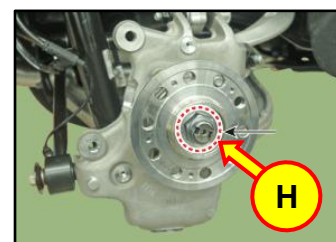
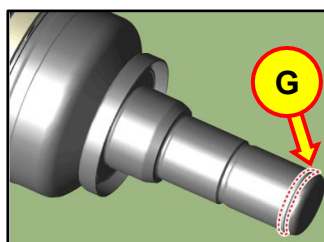
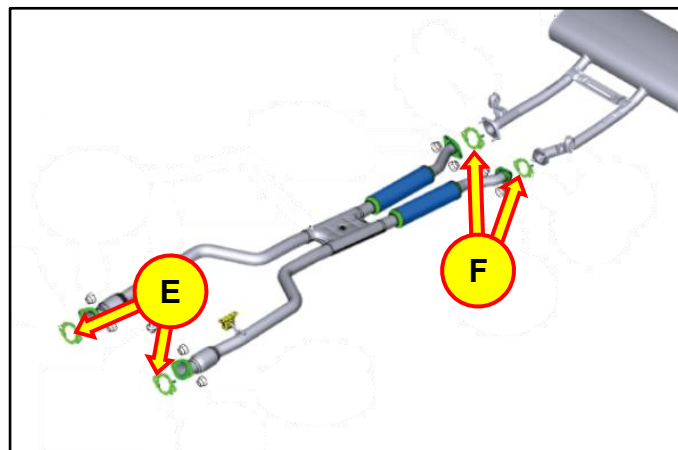
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Propeller shaft to
transmission/
transfer case



Propeller shaft to rear
differential

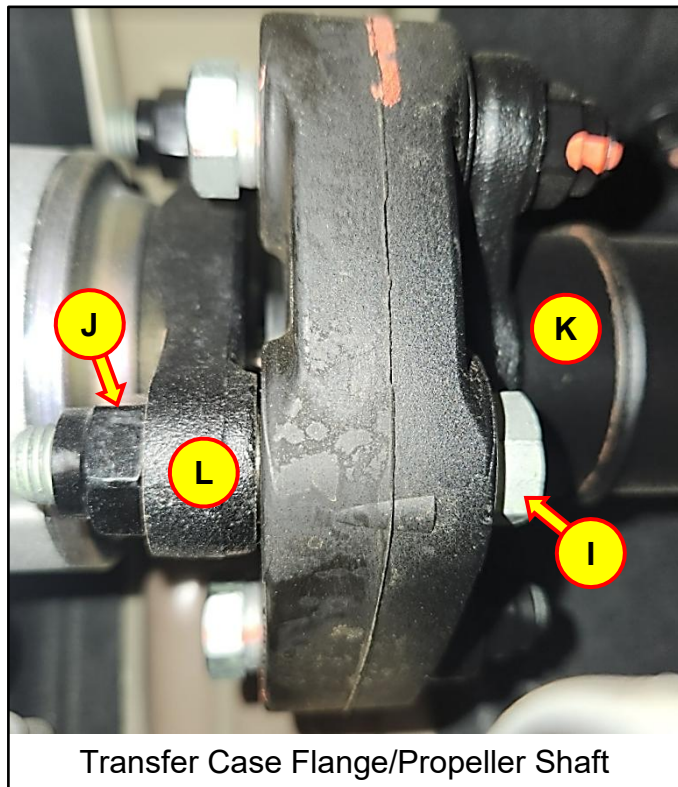


8. Ensure proper propeller shaft alignment and fastener locations:
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 - Washers (RG3 only)
 - Nuts (J)
 - Propeller shaft (K)
 - Rear differential flange (L)

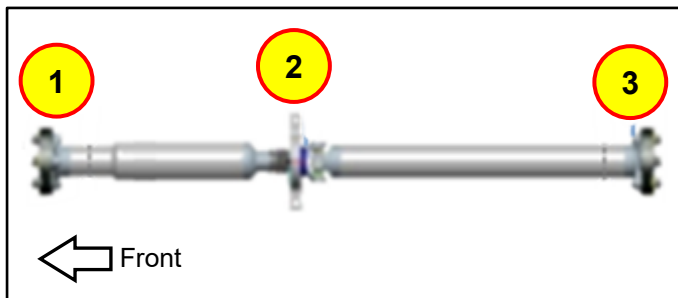
Propeller Shaft to Flange*
Tightening Torque:

lb-ft	73
N.m	99

*Transfer case/transmission and rear differential flanges



9. Install the propeller shaft in the following order:
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11. After reassembly, drive the vehicle on the road to inspect for rear differential noise.

- Hum or whine noise typically occurs in the speed range of **25 - 50 mph** (approx. **80 - 40 km/h**)
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