HYUNDAI NEW THINKING. NEW POSSIBILITIES. **Technical Service Bulletin**	GROUP **RECALL**	NUMBER **15-01-054**
	DATE **DECEMBER 2015**	MODEL(S) **Genesis Coupe (BK)**

SUBJECT: DIFFERENTIAL CARRIER MOUNTING BOLT REPLACEMENT (RECALL 135)

★ IMPORTANT

***** Dealer Stock and Retail Vehicles *****

Dealers must perform this Recall Campaign on all affected vehicles prior to customer retail delivery and whenever an affected vehicle is in the shop for any maintenance or repair.

When a vehicle arrives at the Service Department, access Hyundai Motor America's "Warranty Vehicle Information" screen via WEBDCS to identify open Campaigns.

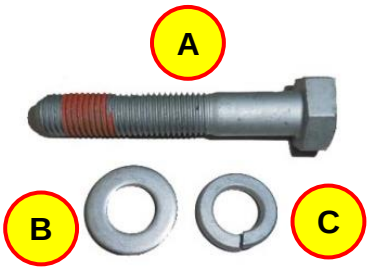
Description: The differential carrier bolts may loosen over time causing damage to the bolts, allowing the differential to move out of position resulting in a loss of power to the drive wheels. This can increase the risk of a crash. This bulletin describes the procedure to inspect and replace the differential carrier bolts and if necessary, the differential cover.

Applicable Vehicles: 2013 – 2015 Genesis Coupe (BK) with Manual Transmission
Production Dates: June 01, 2012 through April 06, 2015

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

SUBJECT: DIFFERENTIAL CARRIER MOUNTING BOLT REPLACEMENT (RECALL 135)

Parts Information:

Part Name	Old	New	Remark
Bolt Assembly	55419-3M000 	55419-2M000AQQH 	New part includes: A: Self-locking bolt B: Flat washer C: Spring washer **Order three (3) bolt assemblies to repair the vehicle.**
Differential Cover	 53075-3C000QQH		Order based on the inspection results.

Tools and Equipment Required:

Oil Pan Remover SST: 09215-3C000	Hyundai RTV Silicone P/N: 00232-19061	Feeler Gauge (0.0015in, 0.04mm)
		

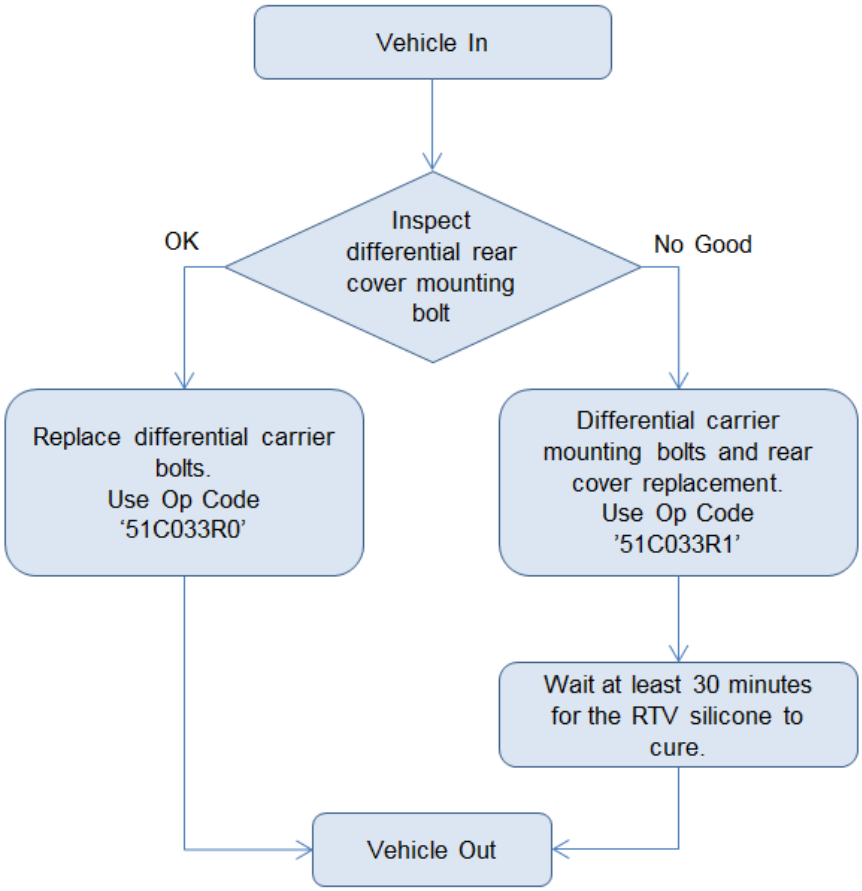
Warranty Information:

Op. Code	Operation	Op. Time
51C033R0	Differential carrier mounting bolts inspection and replacement	0.5 M/H
51C033R1	Differential carrier mounting bolts inspection and replacement and rear cover replacement	1.5 M/H

NOTE: Submit Claim on Campaign Claim Entry Screen

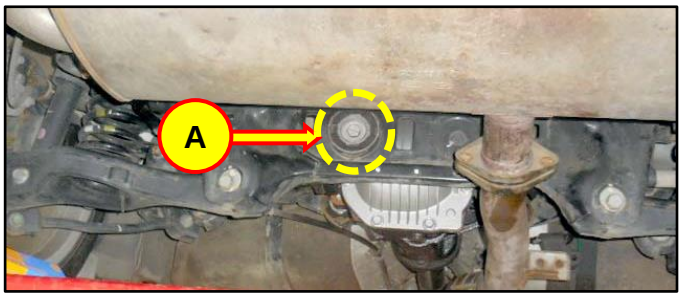
Service Procedure:

Refer to the flowchart below.



1. Lift the vehicle with a hoist.

   Locate the rear differential mounting bolt (A).



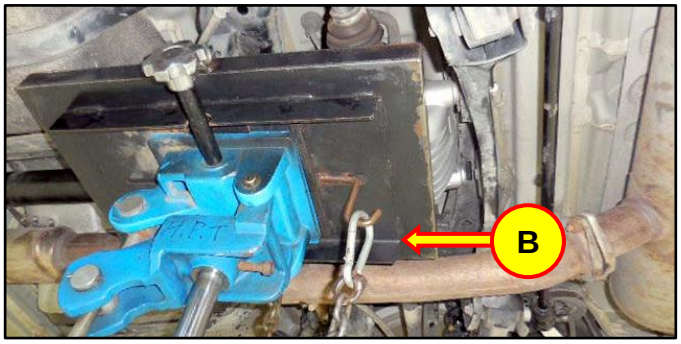
✶ NOTE

The rear cross member is equipped with a single left mounting bushing as shown. Do not alter or modify the rear subframe.

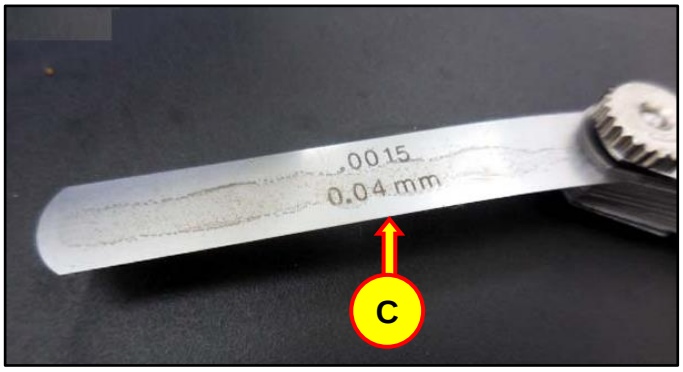
2. Check the torque of the differential rear mounting bolt (A) and tighten if necessary.

   Tightening torque:
   107.8 ~ 127.4 Nm (11 ~13 kgf.m, 79.5 ~ 94.0 lb-ft)

3. Place a jack (B) under the differential carrier. Slightly lift up the differential carrier with the jack then lower the jack.



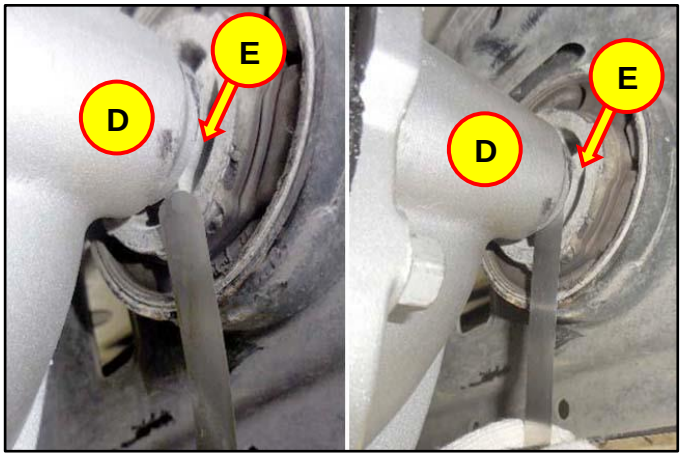
4. Prepare the 0.0015in (0.04mm) feeler gauge (C).



5. Check the gap between the differential carrier cover (D) and the embossed portion of the bushing (E) using the 0.0015in (0.04mm) feeler gauge.

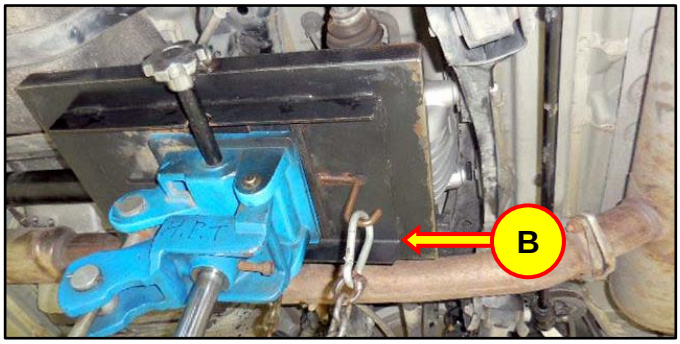
<u>Case 1</u>: If the feeler gauge does **<u>NOT</u>** fit, continue with the procedures in step 6 to replace the three differential mounting bolts.
Use Op Code '51C033R0'.

<u>Case 2</u>: If the feeler gauge does fit, follow the **DIFFERENTIAL COVER REPLACEMENT** procedures starting on page 7.
Use Op Code '51C033R1'.

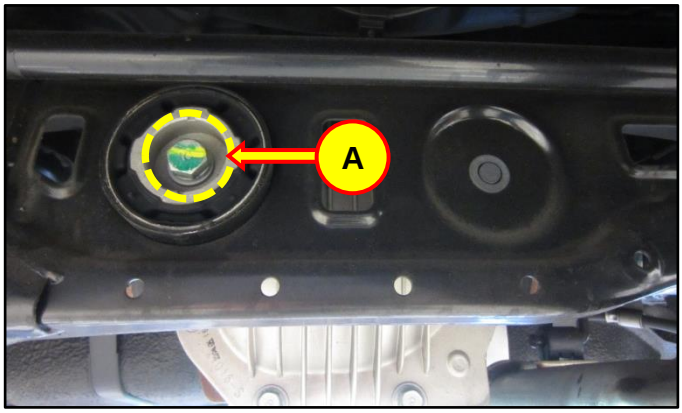


Case 1 **Case 2**

6. Support the differential carrier with a jack (B).



7. Remove the rear differential carrier mounting bolt (A).

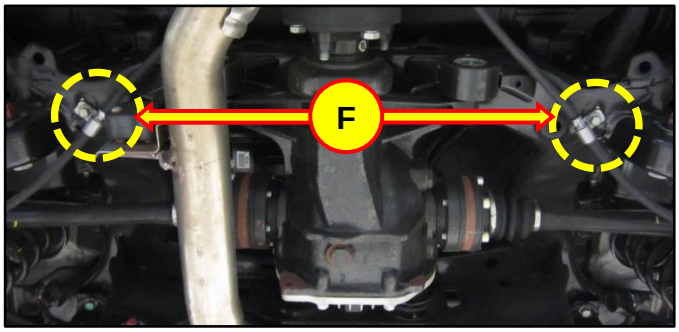


⚠ CAUTION

Do not reuse the bolt during reinstallation. Only use a new bolt assembly.

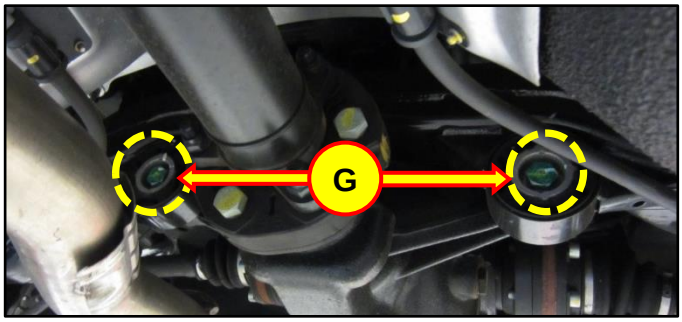
8. Remove the left and right parking brake cable bracket bolts (F).

Tightening torque:
8.8 ~ 13.7 Nm (0.9 ~ 1.4 kgf.m, 6.5 ~ 10.1 lb-ft)

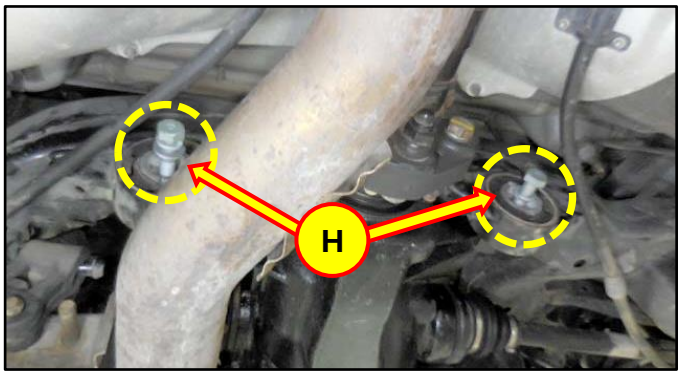


9. Remove the two front differential carrier mounting bolts (G).

Do not reuse these bolts during reassembly.

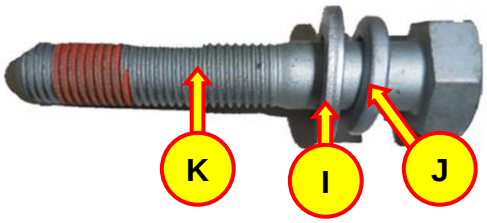


10. Temporarily install two new bolt assemblies (H) by hand.

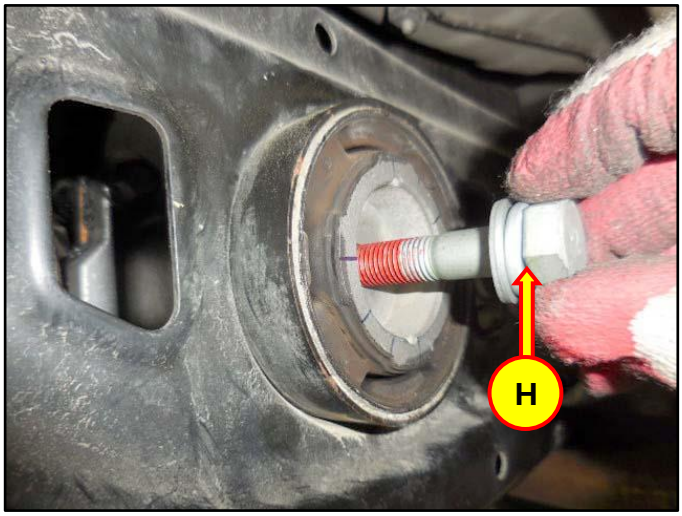


✶ NOTE

Bolt Assembly (H): Ensure that the flat washer (I) and the spring washer (J) are assembled onto the self-locking bolt (K) in the order as shown in the picture below.

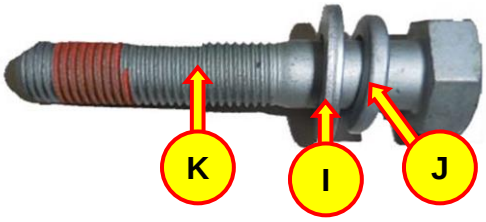


11. Temporarily install a new rear mount bolt assembly (H) by hand.



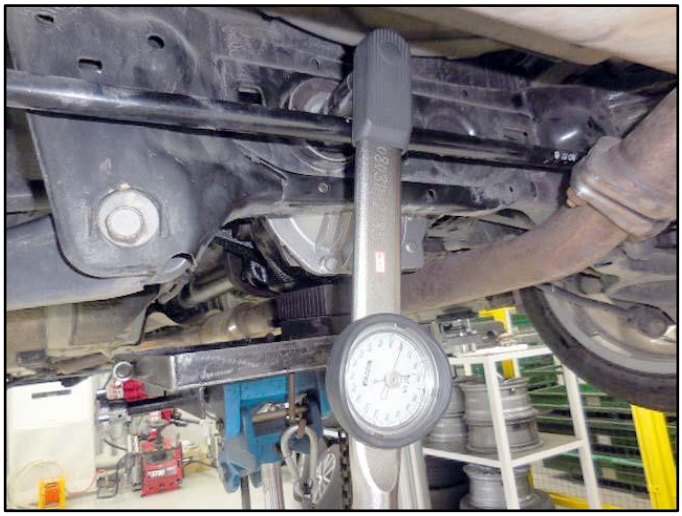
★ NOTE

Bolt Assembly (H): Ensure that the flat washer (I) and the spring washer (J) are assembled onto the self-locking bolt (K) in the order as shown in the picture below.



12. Tighten the front and rear mounting bolts to the specified torque.

Tightening torque:
107.8 ~ 127.4 Nm (11.0 ~ 13.0 kgf.m, 79.5 ~ 94.0 lb-ft)



⚠ CAUTION

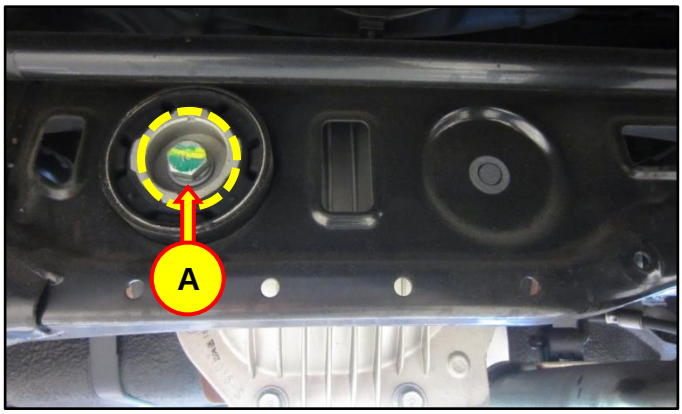
Do not use power tools to install or tighten the three differential mounting bolts. The threads can be damaged. Use hand tools to bring the bolts to the specified torque.

13. Reinstall the parking brake cable brackets.

14. Procedure is completed. Use Op Code '51C033R0'.

DIFFERENTIAL COVER REPLACEMENT

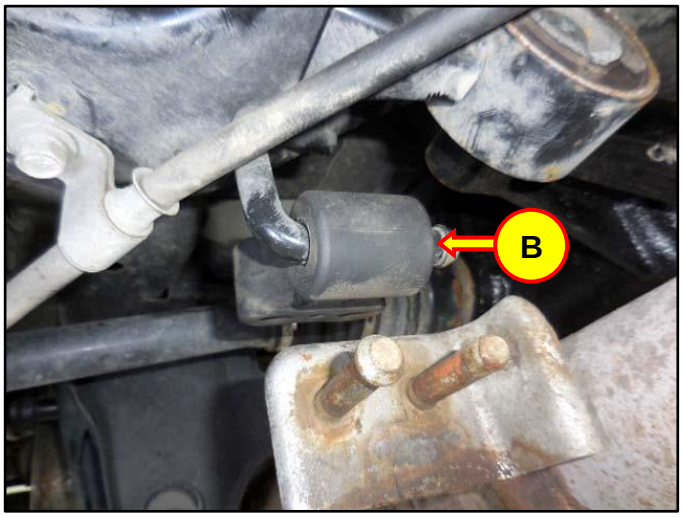
1. Remove the rear differential carrier mounting bolt (A) and discard.



CAUTION

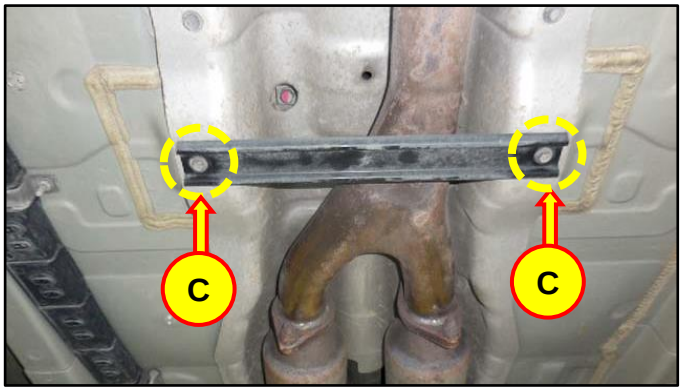
Do not reuse the bolt during reinstallation. Only use a new bolt assembly.

2 Separate the exhaust from the hanger (B).



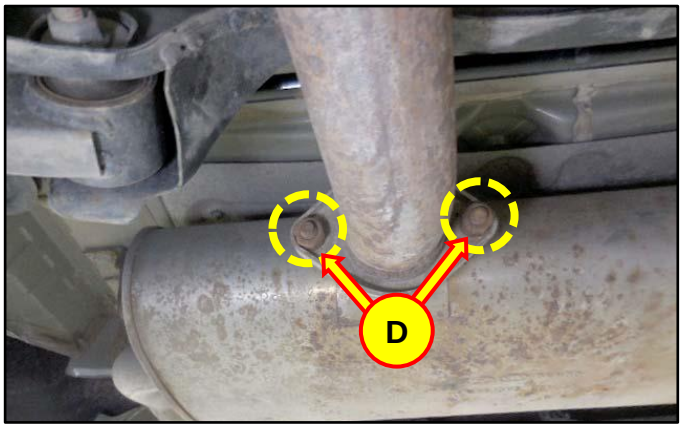
3. Remove the bracket mounting bolts (C).

Tightening torque:
19.6 ~ 24.5 Nm (2.0 ~ 2.5 kgf.m, 14.4~ 18.0 lb-ft)



4. Remove the two center muffler flange nuts (D).

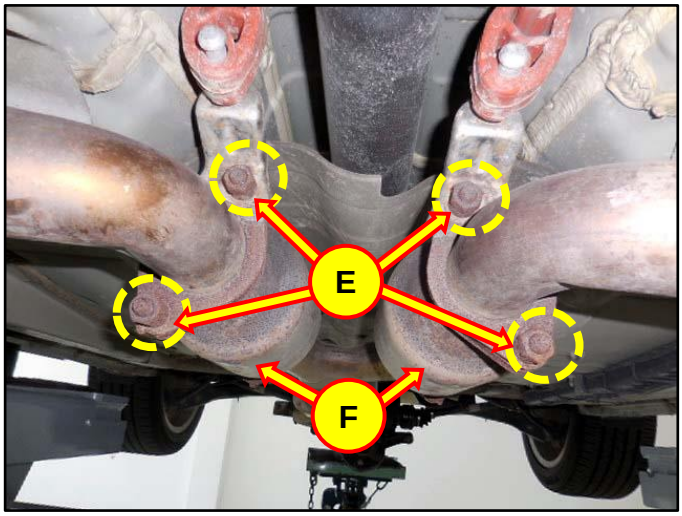
Tightening torque:
39.2 ~ 58.8 Nm (4.0 ~ 6.0 kgf.m, 28.9 ~ 43.3 lb-ft)



5. Remove the four nuts (E) forward of the left and right of the catalytic converters (F).

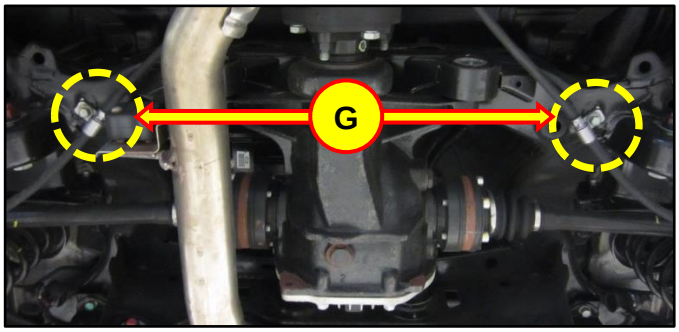
   Carefully set aside the exhaust system.

   Tightening torque:
   39.2 ~ 58.8 Nm (4.0 ~ 6.0 kgf.m, 28.9 ~ 43.3 lb-ft)



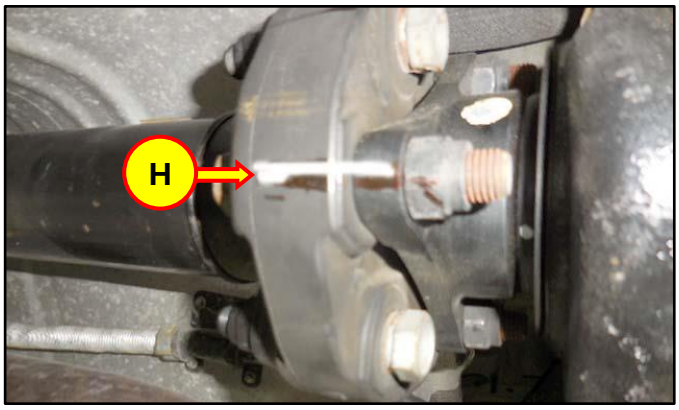
6. Remove the left and right parking brake cable bracket bolts (G).

   Tightening torque:
   8.8 ~ 13.7 Nm (0.9 ~ 1.4 kgf.m, 6.5 ~ 10.1 lb-ft)



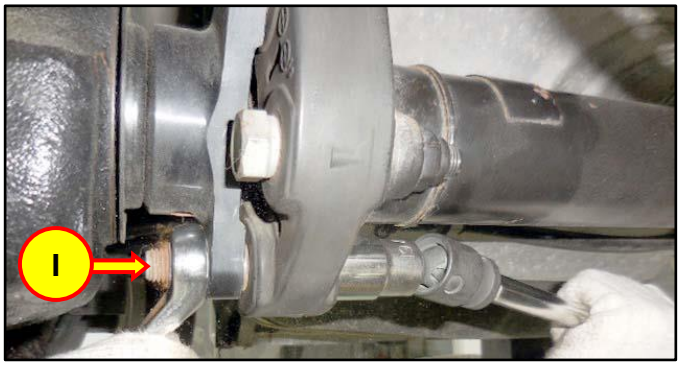
7. Mark a straight line (H) on the rear propeller shaft rubber coupling and the differential bracket using a paint marker.

   Use the line to realign the rear propeller shaft rubber coupling and the differential bracket during reinstallation.



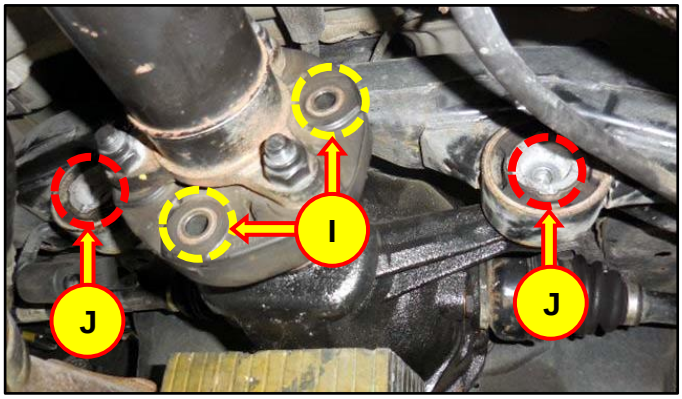
8. Remove the three propeller shaft mounting bolts and nuts (I). Move the propeller shaft end away from the differential carrier.

   Tightening torque:
   88.2 ~ 107.8 Nm (9.0 ~ 11.0 kgf.m, 65.0 ~ 79.5 lb-ft)



9. Remove two front bolts of the differential carrier (J) and discard.

Tightening torque:
107.8 ~ 127.4 Nm (11.0 ~ 13.0 kgf.m, 79.5 ~ 94.0 lb-ft)

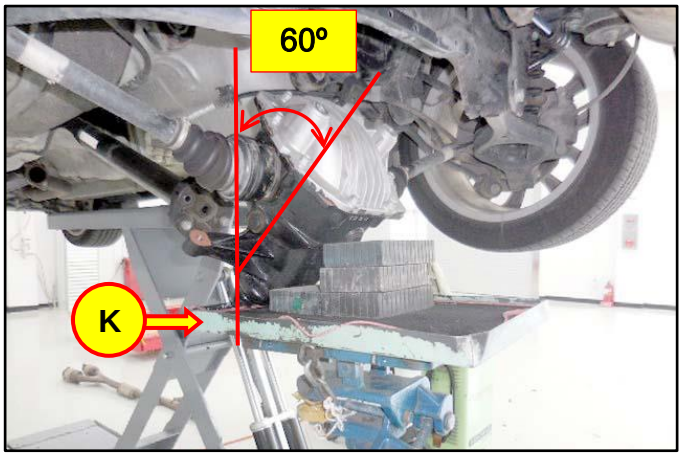


CAUTION

Do not reuse the two front carrier bolts (J) during reinstallation. Only use new bolt assemblies.

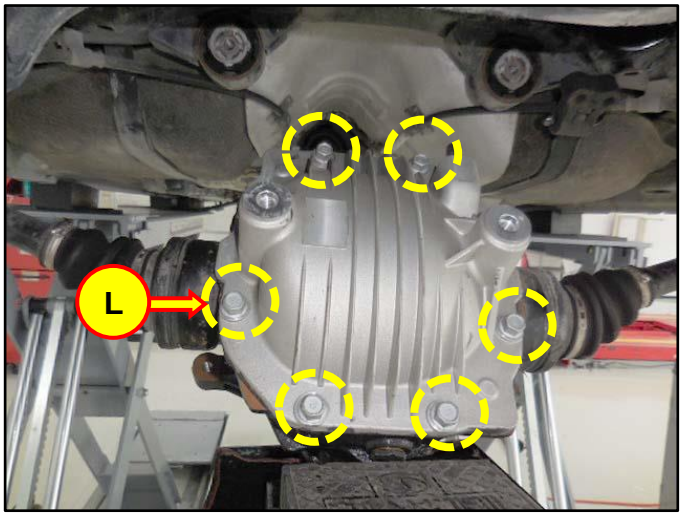
10. Slowly lower the jack (K) until the angle of the differential carrier is approximately 60°.

This angle will prevent the differential gear oil spilling out of the housing during the differential cover removal.

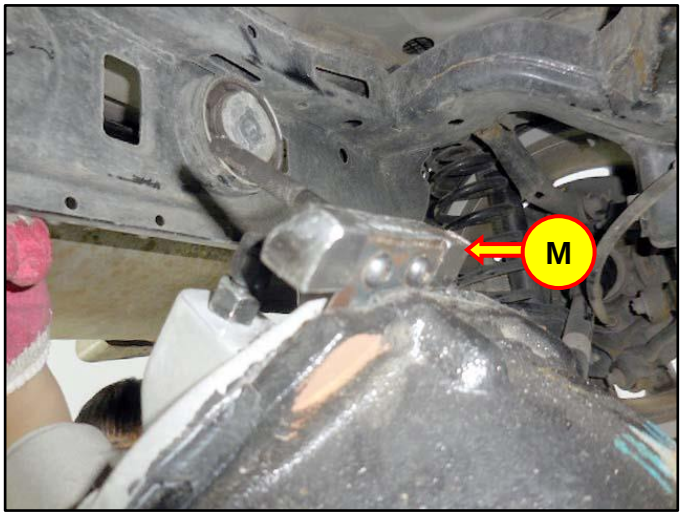


11. Remove the six differential cover mounting bolts (L).

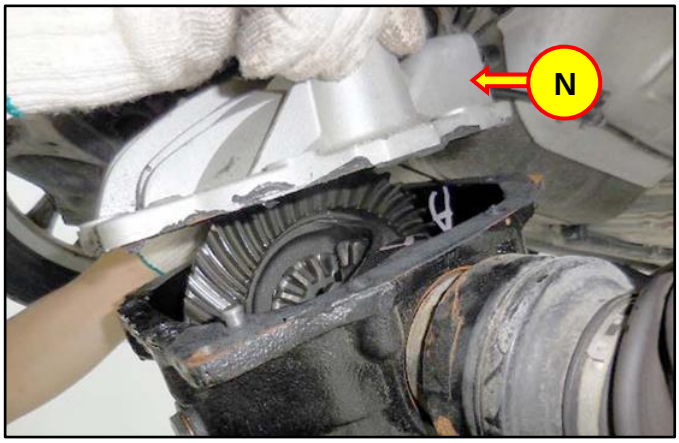
Tightening torque:
39.2 ~ 49.0 Nm (4.0 ~ 5.0 kgf.m, 28.9 ~ 36.1 lb-ft)



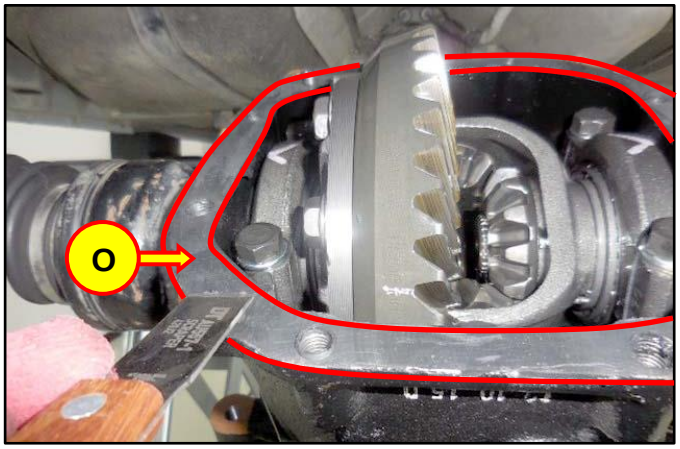
12. Separate the differential cover from the housing using the Oil Pan Remover, SST 09215-3C000 (M).



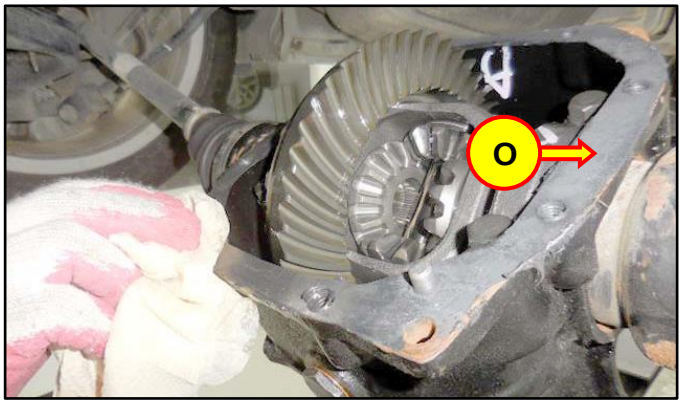
13. Carefully remove the differential cover (N). Do not allow any gasket sealant or debris to fall into the differential housing or differential gear oil.



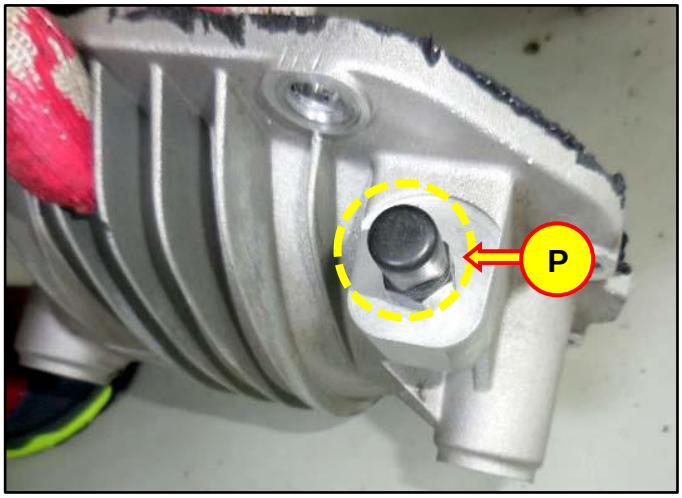
14. Carefully remove all remaining gasket sealant from the differential carrier housing mating surface (O). Do not allow any gasket sealant or debris to fall into the differential housing or differential gear oil.



15. Clean the mating surface (O).

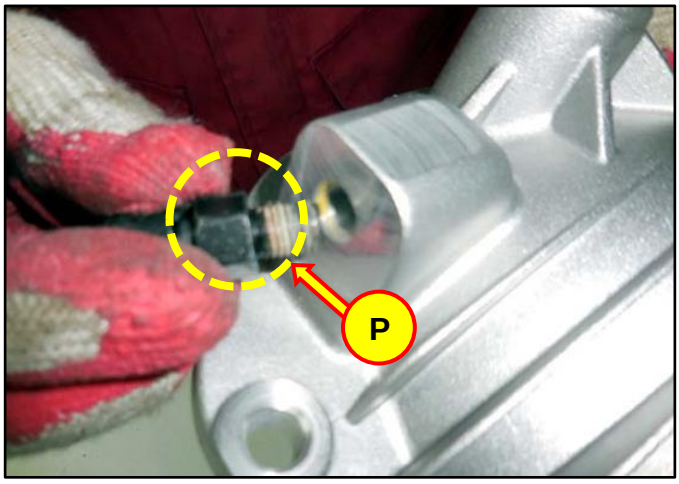


16. Remove the air vent plug (P) from the removed differential cover.



17. Install the air vent plug (P) to the new differential cover.

Tightening torque:
9.8 ~ 19.6 Nm (1.0 ~ 2.0 kgf.m, 7.2 ~ 14.4 lb-ft)

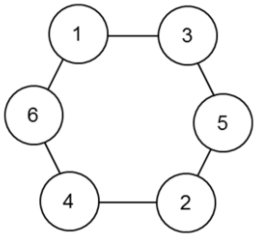


18. Apply a continuous bead of RTV silicone liquid gasket (Q) to the new differential cover and then install the differential cover.

Bead width:
2.0 – 3.0 mm (0.08 – 0.12 in)

✶ NOTE

First, thread the bolts in by hand and then tighten the bolts using hand tools. Tighten the bolts to the specified torque using the star-type sequence shown below.



19. Reinstall the parts in reverse order of removal.

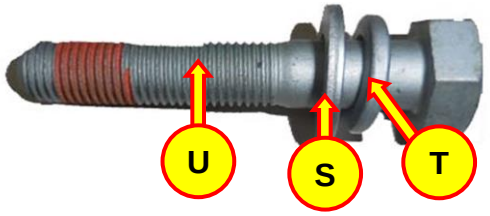
✶ NOTE

During reinstallation of the rear differential carrier;

- Use three new bolt assemblies (R). Do not reuse the removed mounting bolts.
- First, thread the bolt assemblies in by hand and then tighten the bolts using hand tools to the specified torque.
- **Tightening torque: 107.8 ~ 127.4 Nm (11.0 ~ 13.0 kgf.m, 79.5 ~ 94.0 lb-ft)**

✶ NOTE

Bolt Assembly (R): Ensure that the flat washer (S) and the spring washer (T) are assembled onto the self-locking bolt (U) in the order as shown in the picture below.



⚠ CAUTION

Do not use power tools to install or tighten the three differential mounting bolts. The threads can be damaged. Use hand tools to bring the bolts to the specified torque.

20. Wait at least 30 minutes before moving or starting the vehicle to allow the RTV silicone liquid gasket to cure.

21. Check the differential gear oil level. If necessary, refill to drain plug level.

22. Procedure is completed. Use Op Code '51C033R1'.