

Recall Campaign Bulletin



Mercedes-Benz

Campaign No. 2024100002, October 2024

TO: ALL MERCEDES-BENZ CENTERS

SUBJECT: **Model E-Class, CLS, and AMG GT 4-Door (213, 238, 257, and 290 platform)
Model Year 2019 – 2025**

Replace Transmission Wiring Harness

Mercedes-Benz AG, the manufacturer of Mercedes-Benz vehicles, has determined that on certain MY 2019-2023 E-Class (213 and 238 platform), CLS (257 platform), and AMG GT 4-Door (290 platform) AMG vehicles with 4MATIC+, the transmission wiring harness connection might not have been correctly remedied during a prior recall (22V533) repair. In this case, water might enter the connector over time, and result in a short circuit. The short circuit might lead to thermal overload of the connector when the vehicle is parked. Subsequently, the risk of fire cannot be ruled out. An authorized Mercedes-Benz dealer will replace a two-part transmission wiring harness on the potentially affected vehicles.

Prior to performing this Campaign:

- VMI must be checked before performing campaigns to verify that the campaign is required on a specific vehicle. Always check for any other open campaigns and perform accordingly.
- Please review the entire Campaign bulletin and follow the repair procedure exactly as described.

Approximately 15,654 vehicles are affected.

Order No. P-RC-2024100002

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Replace Transmission Wiring Harness

Models 213, 290, 238 and 257

Work Procedure

1. Disconnect ground line of 12 V on-board electrical system battery.

i For basic data, see **AR54.10-P-0003***.

* Select the WIS document according to the vehicle model.

2. Remove rear engine compartment lining (**Figure 1, A**).

i For basic information, see:

AR61.20-P-1105LWE for models 213 and 238,

AR61.20-P-1105FRX for model 290,

AR61.20-P-1105FR for model 257

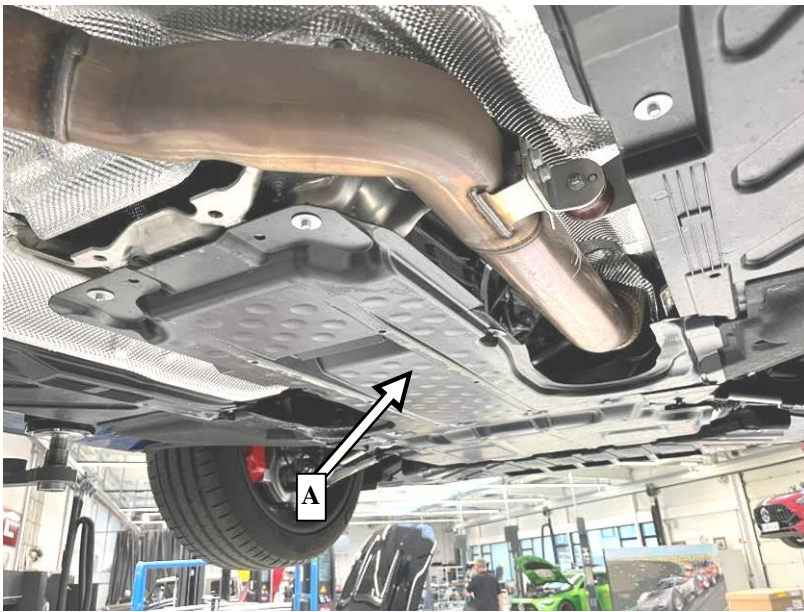


Figure 1

3. Disconnect electrical connector (**Figure 2**) at transfer case control unit (N45) above rear transmission crossmember and guide the wiring harness out toward the front, in the direction of the transmission.

i To do this, gently press the heat shield under the transfer case down slightly.

i Once the harness is guided out, disconnect the hanging line (**Figure 3**) from the wiring harness on the vehicle side.

i The removed wiring harness from the connector coupling (**Figure 3, X279**) to the connector coupling of the transfer case control unit (N45) is not reinstalled and can be discarded (**Figure 3 – marked in red**).

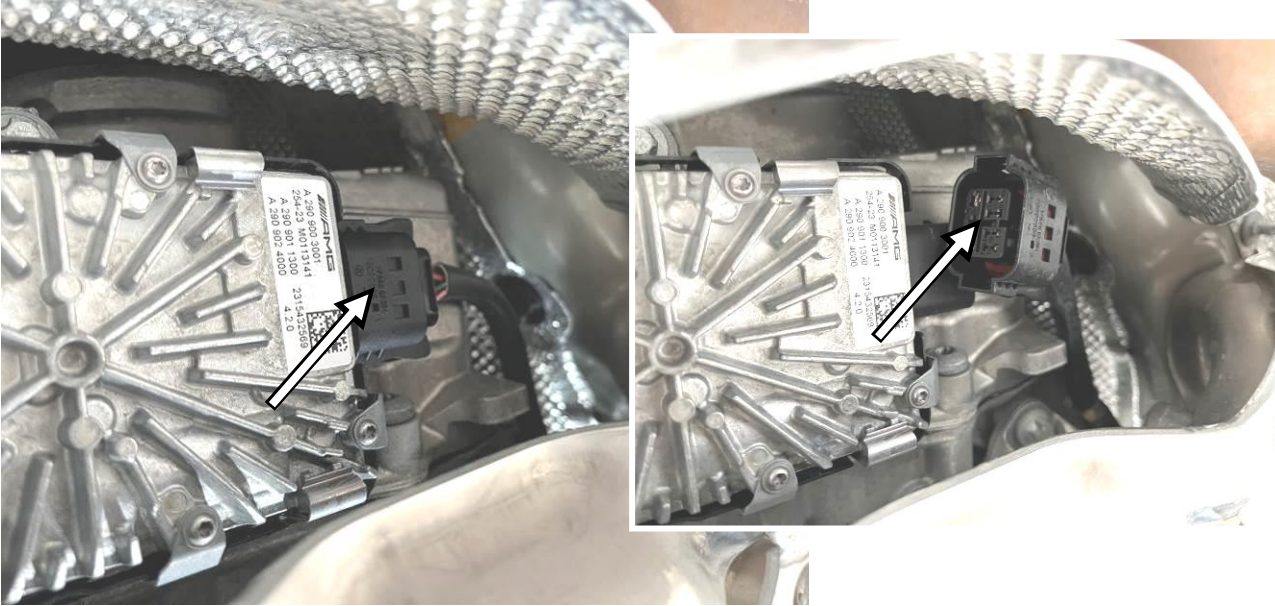


Figure 2

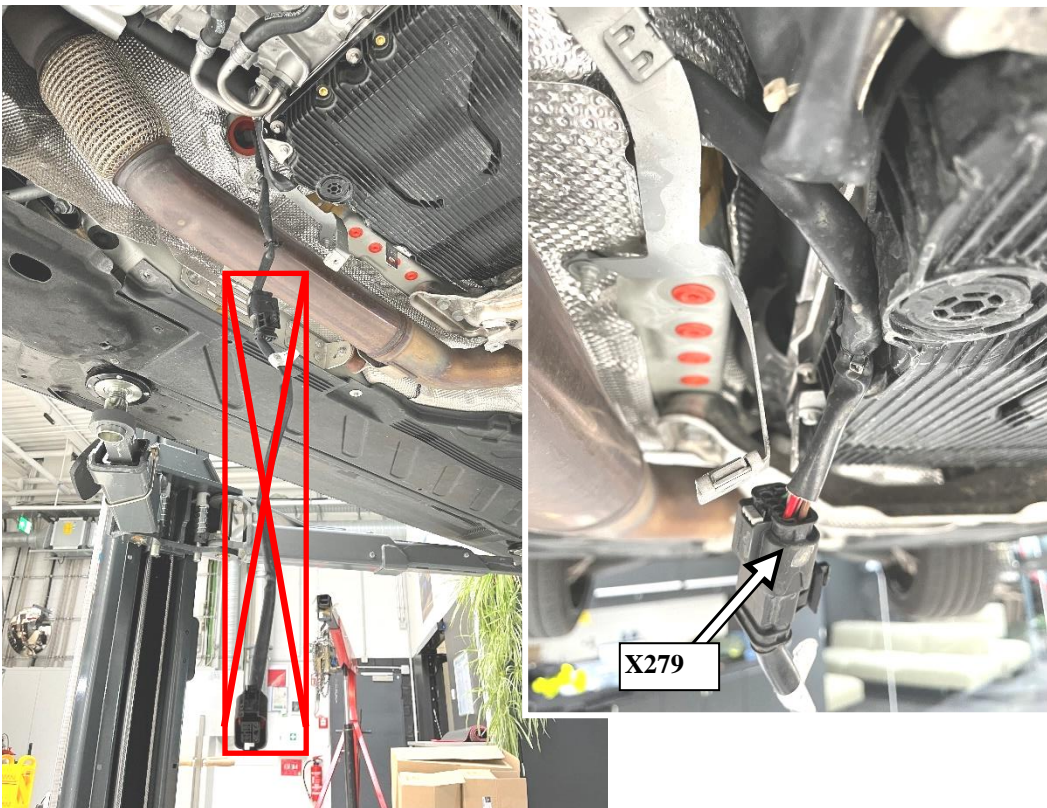


Figure 3

4. Cut the vehicle side wiring harness 15 mm below the cable tie (Figure 4, B) and then remove the cable tie installed above it, including the fastening clip (Figure 4, B).

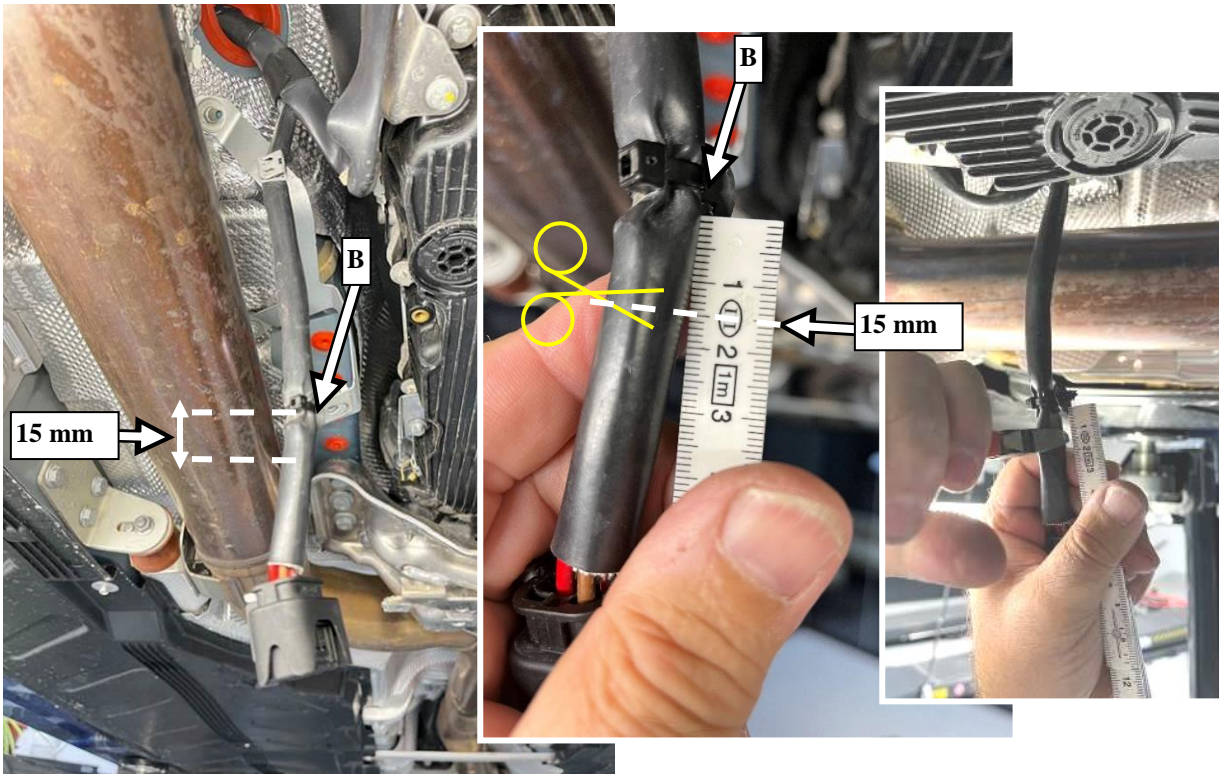


Figure 4

5. Slide the fabric protective hose on the vehicle side wiring harness upward as far as possible toward the retaining clamp (Figure 5, C) and use a cable tie to temporarily secure it against sliding down (cable tie will be removed in Step 12).

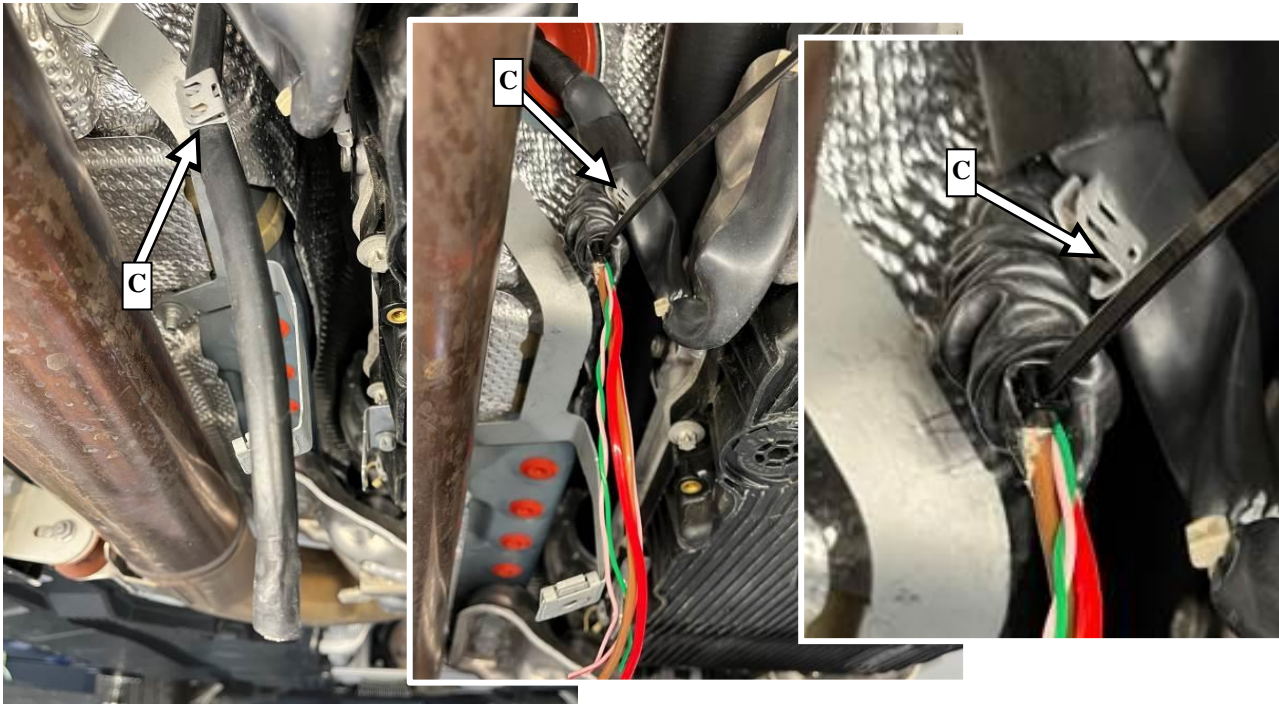


Figure 5

6. Completely remove the fabric insulating tape of the new repair wiring harness up to the fabric protective hose (**Figure 6**).



Figure 6

7. Shorten the brown cable of the repair wiring harness to a length of **100 mm** measured from the fabric protective hose (**Figure 7, D**). Insert the soldering end sleeve halfway into the fabric protective hose (**Figure 7, F**).

i Strip the end of the brown cable **15 mm** (**Figure 7, E**) and slide it into the soldering end sleeve (**Figure 7, F**).

i Do not kink the line!

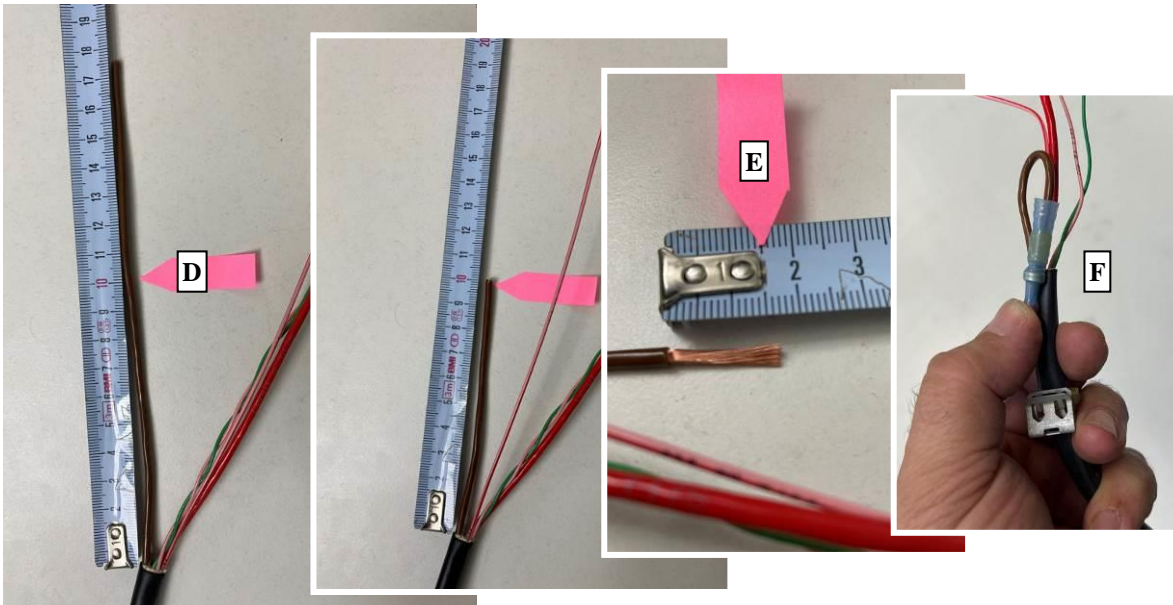


Figure 7

8. Clip the new repair wiring harness with preinstalled fastening clip (**Figure 8, G**) into the transmission bracket.

i The installation with a fastening clip aids in maintaining the length specification when soldering.



Figure 8

9. Shorten the brown cable of the vehicle side wiring harness enough for it to be inserted into the soldering end sleeve without tension or pressure.

i Strip the brown cable on the vehicle side wiring harness **15 mm** for subsequent soldering.

i For soldering, the repair wiring harness can be released from the fastening clip (**Figure 8, G**) again.

10. Remove the soldering end sleeve from the fabric protective hose, solder both stripped and twisted brown cable ends using a heat gun and reinsert it as far as possible into the fabric protected hose after cooling (**Figure 9**).

i Do not kink the line!

i Observe the specifications in **AR00.19-P-0100-09A** regarding the repair of wiring harnesses using an end sleeve.

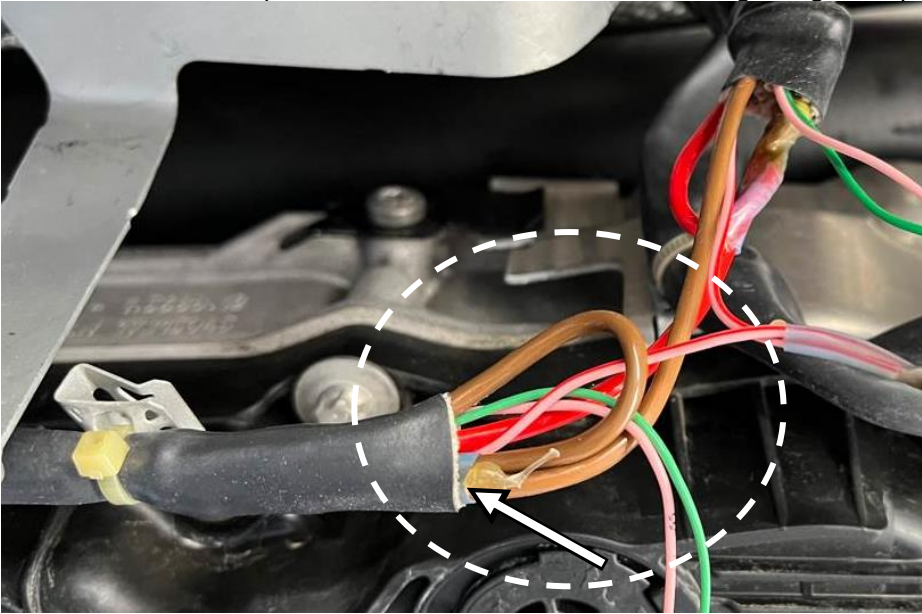


Figure 9

11. Solder the remaining cables of the same color with soldering end sleeves (**Figure 10**) without any tension or pressure on the cables or solder joints. The cables can be shortened if necessary.

i Offset the cable lengths so that the soldering end sleeves do not rest on top of each other.

i Observe the specifications in **AR00.19-P-0100-09A** regarding the repair of wiring harnesses using an end sleeve.

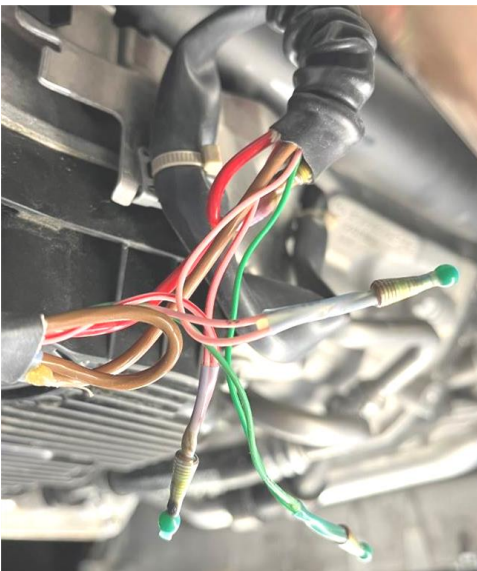


Figure 10

12. Remove the cable tie for fastening the fabric protective hose (secured during Step 5) and carefully slide the fabric protective hose over the wiring harness and the soldering end sleeves (**Figure 11**).

- i** Arrange the soldering end sleeves within the wiring harness so that they are staggered/offset from one another.
- i** Wrap the ends of the two fabric protective hoses together using fabric insulating tape.



Figure 11

13. In vehicles **without a wiring harness bracket**, attach an additional wiring harness bracket (**Figure 12, H**) with a new screw to the oil pan.

- i** **Only required on vehicles without a wiring harness bracket!**
- i** Threaded bushing is already present in the oil pan.
- Nm** Wiring harness holder to oil pan: **8 Nm**.

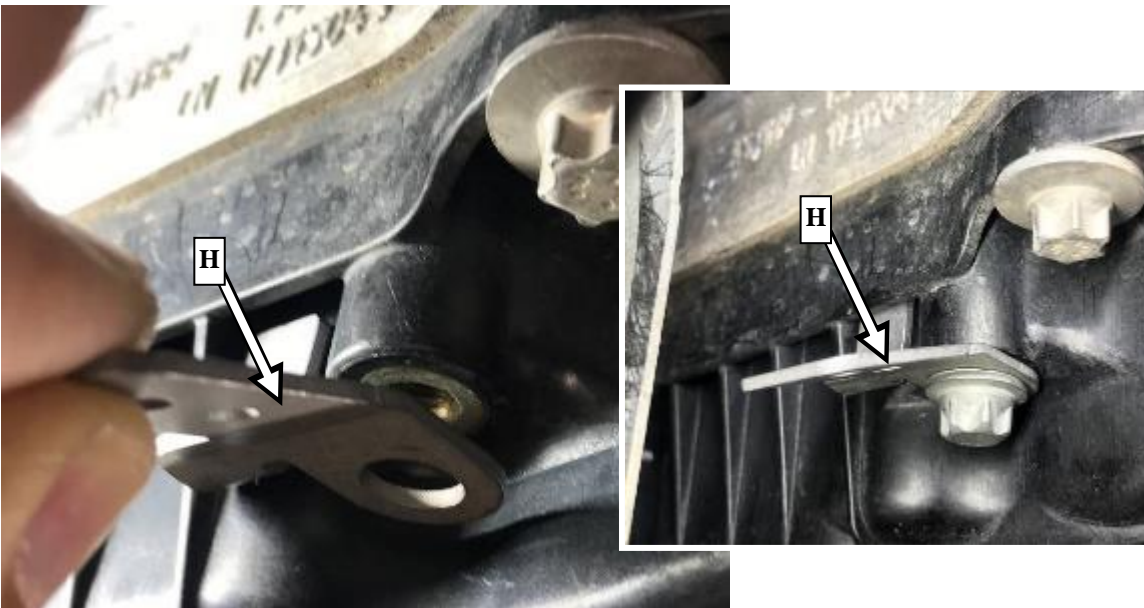


Figure 12

14. Route the wiring harness along the transmission to the connector coupling of the transfer case (N45).

i Clip the retaining clamp onto the wiring harness bracket (**Figure 13, H**).

i Clip the retaining clamp onto the holder (**Figure 13, I**).

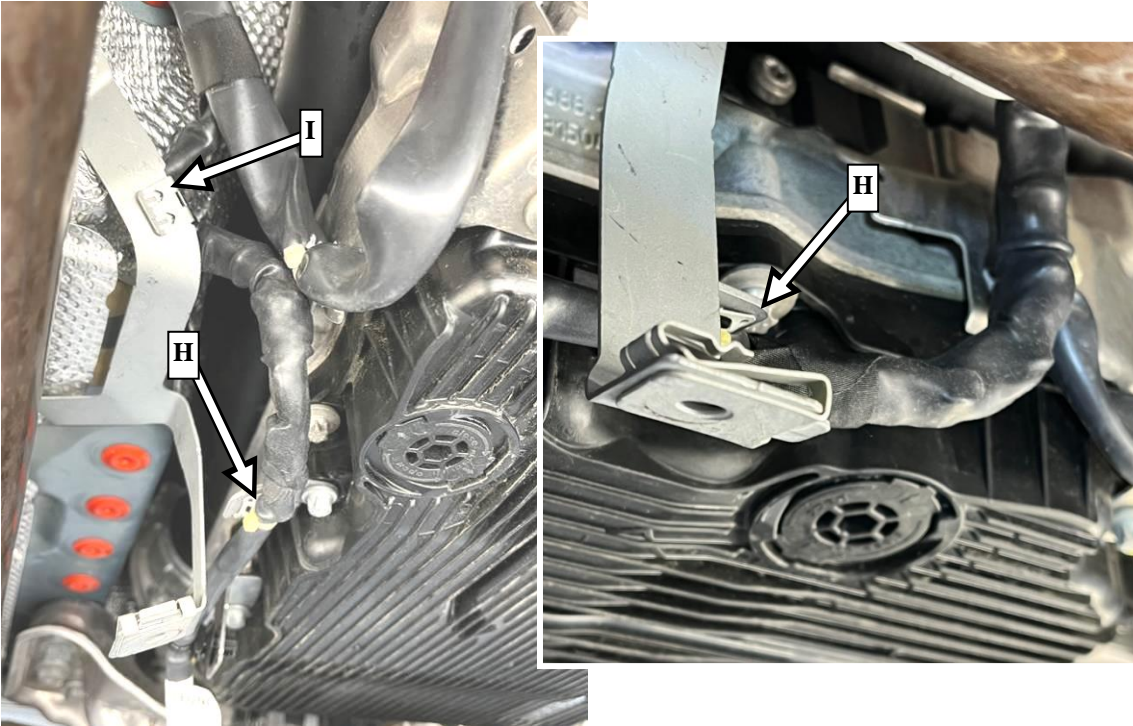


Figure 13

15. Clip the retaining clamp onto the rib of the oil pan of the transmission (**Figure 14, J**), clip the retaining clamp onto the rib of the transfer case (**Figure 14, K**) and connect the connector coupling of the transfer case control unit (N45).

i The transfer case control unit (N45) connector must engage audibly.

i Then align the heat shield under the transfer case.

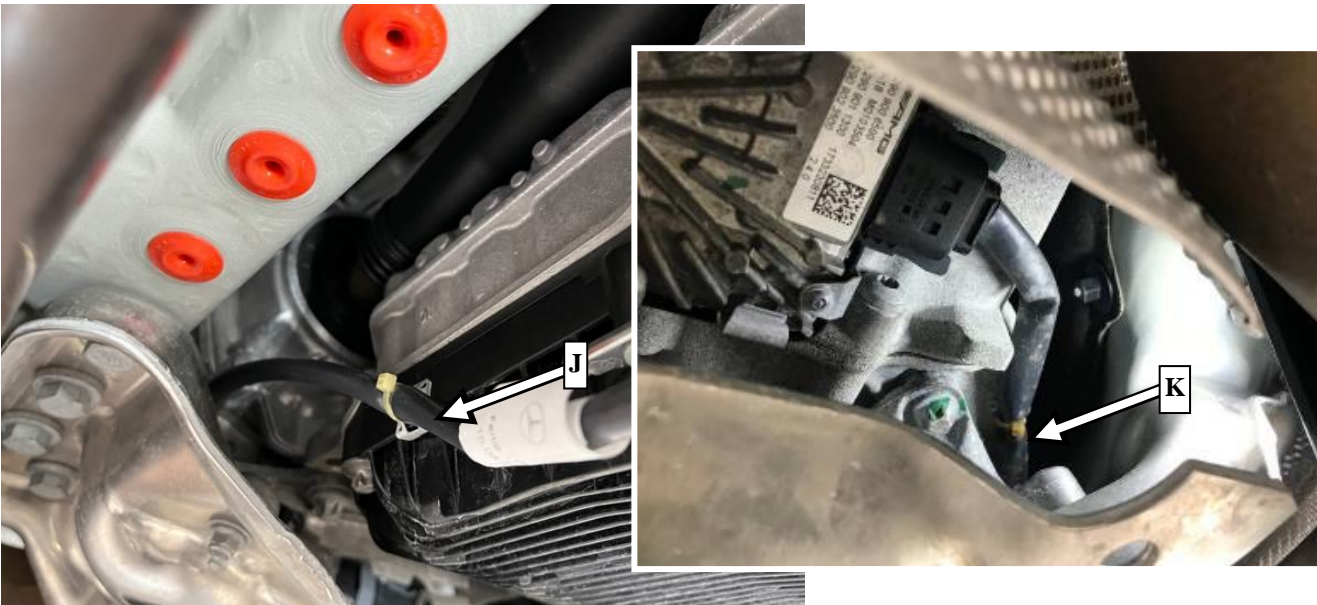


Figure 14

16. Ensure the routing distance of the new wiring harness is **at least 10 mm** from the drive shaft between the transfer case and the front axle differential (**Figure 15, yellow arrow**).

i If the distance is less than **10 mm**, increase the distance with an additional heat-resistant cable tie (**Figure 15, L**).



Figure 15

17. Assemble in reverse order.

Primary Parts Information

Qty.	Part Name	Part Number
1	Repair kit (wiring harness incl. connector coupling)	A 290 540 02 16
2	End sleeve (red)	A 000 982 92 10
3	End sleeve (green)	A 000 982 91 10
As required (1)*	Adhesive tape	A 002 983 64 13
As required (1)**	Screw	N 910143 006001
As required (1)**	Holder	A 290 545 69 00
As required (1)	Heat-resistant cable tie	A 000 995 25 94

* 1 packaging unit is to be used for approximately 10 vehicles.

** Determine requirement in Step 13 of the Work Procedure.

i Small parts such as screws, lock nuts, sealing rings, **cable ties**, fluids, sealant, etc. are not listed in the parts list. The required small parts are taken into account in the budgeting.

i **Note:** The following allowable labor operation should be used when submitting a warranty claim for this repair:

Warranty Information

Damage Code	Operation Number	Description	Labor Time (hrs.)
15 950 03	12-2168	Replace electrical wiring harness for transfer case (N45) Includes: Remove rear underfloor paneling, retrofit holder for wiring harness as required	1.4
	02-9676	Extra work for: Remove/install engine compartment lining in vehicle with underbody protection	ZM

i **Note:** Always check Xentry Operation Time (XOT) for the current OP-Code times. Labor times are subject to change and updates may not be reflected in this document.