Recall Campaign Bulletin



Campaign No. 2022080010, September 2022 Rev A: January 2024 Recall Campaign Bulletin

Recall Campaign Bulletin

TO: ALL MERCEDES-BENZ CENTERS

SUBJECT: Various Models

Model Year 2019-2022

Check Transmission Wiring Harness Connector

Mercedes-Benz AG (MBAG), the manufacturer of Mercedes-Benz vehicles, has determined that on certain Model Year 2019-2022 E-Class (213 platform), E-Class Coupe/Cabriolet (238 platform), CLS (257 platform) and AMG GT 4-door (290 platform) 4MATIC vehicles, the transmission wiring harness might not be routed according to specifications. Tension on the transmission wiring harness could lead to wire insulation pulling back from the electrical connector and as a result, water could enter the connector. Water ingress could lead to a short circuit and/or thermal overload if the vehicle's ignition is off for longer periods of time. As a result, the risk of fire cannot be ruled out. Before the issue occurs, the driver may be alerted to the condition by illumination of the yellow battery (electrical charge) indicator lamp and/or the "4MATIC malfunction" warning message in the instrument cluster. An authorized Mercedes-Benz dealer will check the electrical connector on the affected vehicles and rework it, if necessary.

Prior to performing this Campaign:

- VMI must always 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 16,977 vehicles are affected.

Order No. P-RC-2022080010

This bulletin has been created and maintained in accordance with MBUSA-SLP S423QH001, Document and Data Control, and MBUSA-SLP S424HH001, Control of Quality Record

Check electrical connector on automatic transmission oil pan and rework or replace it, if necessary

Check/test procedure

1. Remove lower rear engine compartment lining (under transmission).

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

2. Disconnect electrical connector X279 (A, Figure 1) from right oil pan.

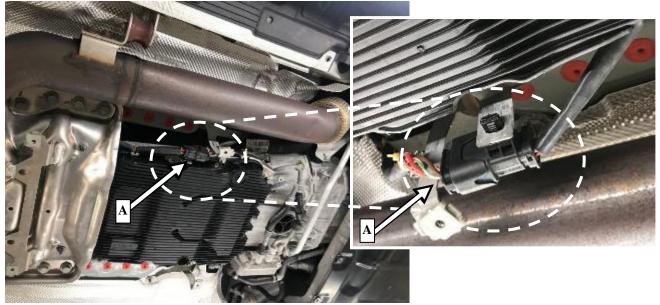


Figure 1

3. Check insides of connector coupling on vehicle-side wiring harness A 290 540 99 14 (B, Figure 2) and transfer case wiring harness A 213 540 32 69 (C, Figure 2) for corrosion and other damage or noticeable problems.

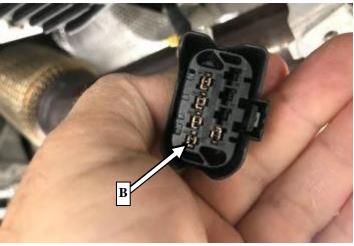




Figure 2

- **a.** If corrosion or moisture is detected, the vehicle-side wiring harness (A 290 540 99 14) must be repaired and the transfer case wiring harness (A 213 540 32 69) **must always be replaced**.
- b. If OK, remove pins from vehicle-side wiring harness (B, Figure 2) using special tool W 220 589 01 99 63 (Figure 3) individually and one after the other, check for corrosion and damage, and reinsert pins.
- Equivalent commercially available unpinning tools can also be used.
- i Do not remove all pins from the plug housing at the same time.
- The pins must audibly "click" engage when reinserted.
- I No damage or noticeable problems may be visible.
- $oxed{1}$ No sealing elements may be damaged or melted at the cables.
- i Sealing elements must be properly crimped in the cable lug.
- $\boxed{\mathbf{1}}$ Sealing lip must be visible, **see Figure 5 (OK image)**.
- i Figure 4 (not OK image) shows a defective sealing element.





Figure 3

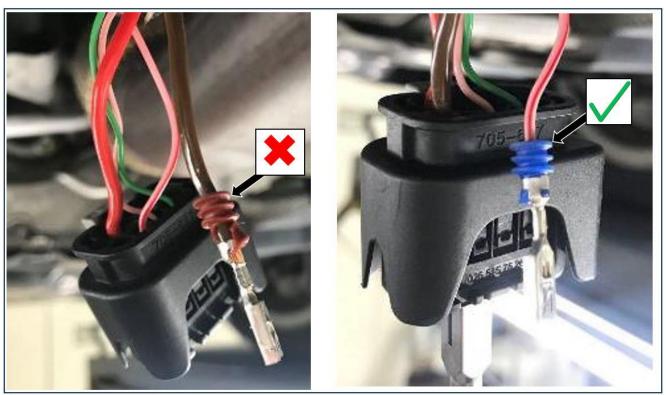


Figure 4: (Sealing element not OK)

Figure 5: (Sealing element OK)

- **4.** Check green blind plugs (D, Figure 6) on rear of plug.
- 5. I A green blind plug that is not seated correctly must be **pressed in further** as per Figure 6 (OK image).

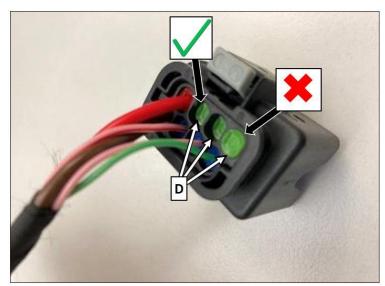


Figure 6

- a. If pins, cables, seals, and plug housings show no damage or corrosion (OK): Carry out work procedure A.
- **b.** If pins, cables, seals, or plug housings **show** damage or corrosion **(not OK)**: Carry out **work procedure B**. **Work procedure A**

- 1. Attach new additional wiring harness bracket (E, Figure 7) with new screw to oil pan.
 - Threaded bushing is present in the oil pan.
 - Wiring harness bracket to oil pan: 8 Nm.

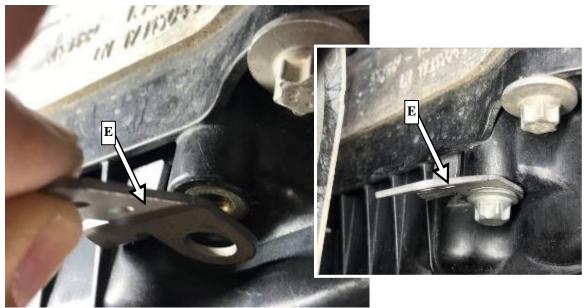


Figure 7

2. Remove retaining clamp including cable tie (arrow, Figure 8) from vehicle-side wiring harness.



Figure 8

- **3.** Attach retaining clamp with new **preassembled** cable tie (Figure 9) to new wiring harness bracket in direction of travel from rear up to end stop.
 - Retaining lugs of the retaining clamp engage in the bores of the bracket.

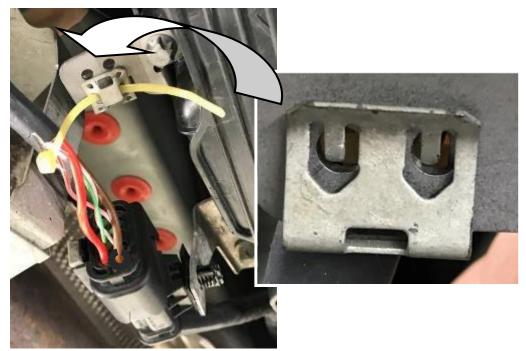


Figure 9

- 4. Blow out connector coupling with compressed air.
- **5.** Connect connector (Figure 10) and allow secondary locking mechanism to engage.
 - $oxed{i}$ Connector (Figure 10) may be connected only if absolutely dry.
- **6.** Attach wiring harness to new wiring harness bracket without tensile or compressive stress using new cable tie (Figure 10).



Figure 10 Work procedure B

In the case of *damage or corrosion* on pins, cables, seals, or plug housings on the vehicle and/or transfer case sides, they must be repaired/replaced as per the **Check/test procedure 3 a.**

When the repaired wiring harness is installed (repair of the vehicle-side wiring harness), the wiring harness on the transfer case must also be replaced without exception.

- 1. Disconnect ground line of the 12 V on-board electrical system battery.
 - For basic information, see AR54.10-P-0003*.
 - * Select the WIS document according to the vehicle model.
- 2. Disconnect vehicle-side wiring harness in marked area and strip, (see Figure 11).
 - Li Repair wiring harness using an end sleeve, see AR00.19-P-0100-09A.



Figure 11

- **3.** Attach additional holder as per work procedure **A**, see Figure 7.
- **4.** Insert repair wiring harness (**A 290 540 99 14**) and attach to new holder using cable tie without tensile or compressive stress, see Figure 10.
- 5. Shorten repair wiring harness (A 290 540 99 14) to necessary length up to repair point (end sleeve).
 - I Vehicle-side repair wiring harness must be installed without tensile or compressive stress.
- 6. Repair wiring harness with end sleeve.
- 7. Remove rear transmission crossbar.
 - i Secure transmission against tilting.
- **8.** Unclip wiring harness on transfer case side from holder of automatic oil pan, unclip transfer case, and disconnect it from the variable transfer case control unit.
 - To disconnect control unit, press shield of exhaust system downward slightly.



Figure 5

- 9. Replace wiring harness on transfer case side.
- 10. Assemble in reverse order.
 - Should drops of water drip into plug housing during the work, they must be blown out with compressed air prior to connecting it.
- i Connector (Figure 8) may be connected only if absolutely dry.

Primary Parts Information

Qty.	Part Name	Part Number
1	Screw	N 910143 006001
1	Bracket	A 290 545 69 00
1	Cable tie	A 006 997 35 90
As required (1)	Repair kit (wiring harness incl. connector coupling)	A 290 540 99 14
As required (2)	Line connector (red)	A 000 982 92 10
As required (3)	Line connector (green)	A 000 982 91 10
As required (1)*	Tape	A 002 983 64 13
As required (1)	Wiring harness transfer case	A 213 540 32 69

* 1 container is to be used for approx. 10 vehicles.

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.

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.)
54 913 09	02-0133	Check electrical connector on oil pan automatic transmission Includes: Scope of work A - retrofit wiring harness bracket	0.6
	12-1992	Repair vehicle wiring harness and replace transfer case wiring harness (after check) Includes: Work procedure B – Install repair wiring harness and transfer case wiring harness	1.2
	02-9676	Extra work for: Remove/install engine compartment lining in vehicle with underbody protection	ZM

Invoice operation item only once for each workshop order.

Note: Always check ASRA for the current OP-Code times. Labor times are subject to change and updates may not be reflected in this document.