



Mercedes-Benz

Campaign No. 2020120007, December 2020

TO: ALL MERCEDES-BENZ & FREIGHTLINER CENTERS

SUBJECT: **Model 906 & 907 Sprinter, Model Year 2015-2020**
Inspect Power Steering Hose Clamps

Mercedes-Benz AG (“MBAG”), the manufacturer of Mercedes-Benz and Freightliner vans, has determined that on certain Mercedes-Benz and Freightliner Sprinter vehicles from platform 907 (VS30) and 906 (NCV3), the hydraulic power steering return line hoses may detach at their connection points under certain operating conditions and may cause hydraulic fluid to leak resulting in the loss of power steering. If the hydraulic power steering hose detaches, the driver will still have manual steering functionality, but increased steering effort is needed, particularly at low speeds. Sudden loss of power steering as well as the loss of hydraulic steering liquid to the road surface may increase the risk of a crash. An authorized Mercedes-Benz or Freightliner Sprinter dealer will check the return line connections of the power steering system and if needed, install the respective replacement clamp.

Prior to performing this Recall Campaign:

- Please check VMI to determine if the vehicle is involved in the Campaign and if it has been previously repaired.
- Please review the entire Recall Campaign bulletin and follow the repair procedure exactly as described.

Please note that Recall Campaigns **do not expire** and may also be performed on a vehicle with a vehicle status indicator.

Approximately **47,667** vehicles are involved.

Order No. V-RC-2020120007

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

- Model** **906 with engine 642**
with code ZU7 (National version for Canada)
- Model** **906 with engine 642**
with code ZU8 (National version for USA)
- Model** **906 with engine 651**
with code ZU7 (National version for Canada)
- Model** **906 with engine 651**
with code ZU8 (National version for USA)
- Model** **907 with engine 642**
with code ZG1 (Engageable all-wheel drive)
with code ZU7 (National version for Canada)
- Model** **907 with engine 642**
with code ZG1 (Engageable all-wheel drive)
with code ZU8 (National version for USA)
- Model** **907 with engine 642**
with code ZG3 (Engageable all-wheel drive with gear reduction)
with code ZU7 (National version for Canada)
- Model** **907 with engine 642**
with code ZG3 (Engageable all-wheel drive with gear reduction)
with code ZU8 (National version for USA)

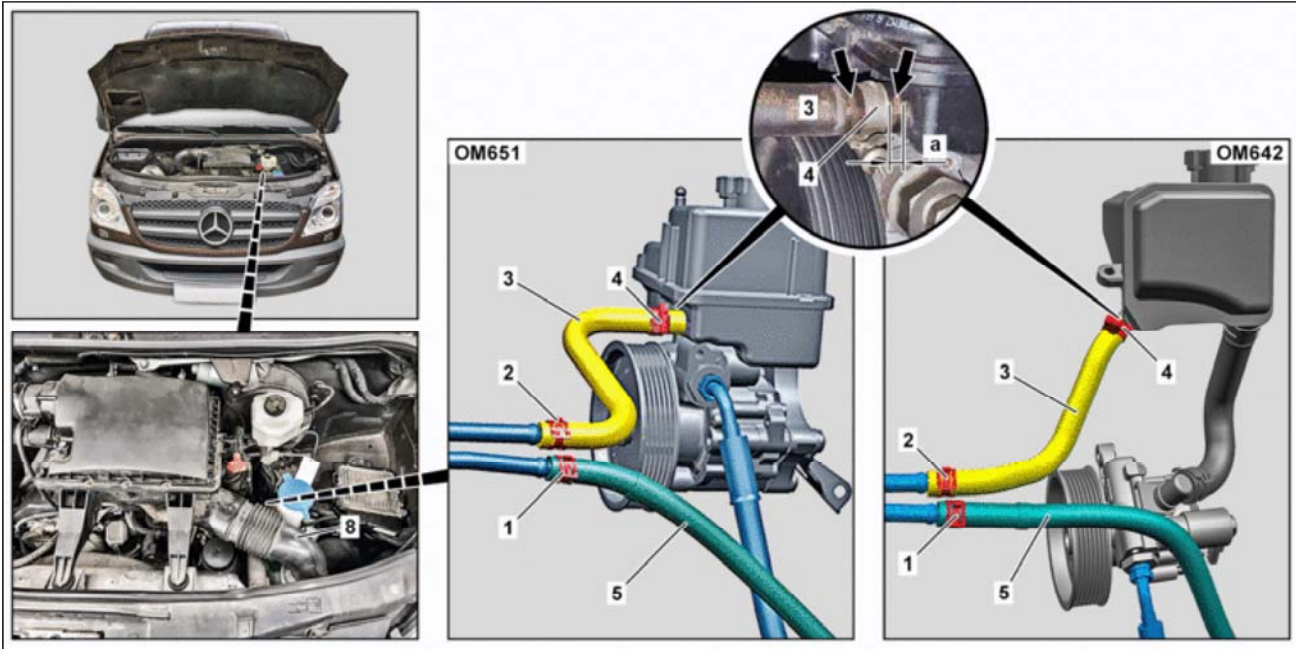
Operation no. of the operation texts or standard texts and flat rates

Category	Op. no.	Operation text	Time	Acc. no.	Code
L	02 1139	Operations: Check hydraulic lines of power steering	0.2 hrs	46 950 79	NV3LETULP E
L	02 1140	Operations: Replace one hose clamp on power steering oil cooler (after check)	0.5 hrs	46 950 79	NV3LETULP E
L	02 1146	Operations: Replace 2 hose clamps on power steering oil cooler (after check)	0.6 hrs	46 950 79	NV3LETULP E
L	02 1145	Operations: Reposition a hose clamp on power steering expansion reservoir (after check)	0.2 hrs	46 950 79	NV3LETULP E

The following test and operation steps are shown on a vehicle with engine 651 and must be performed in the same way on vehicles with engine 642.

All 3 clamps (1, 2, 4) together with the listed connections must always be checked.

On vehicles with engine 642, the as-built configuration may deviate slightly (see first picture), which does not impair the procedure shown here.

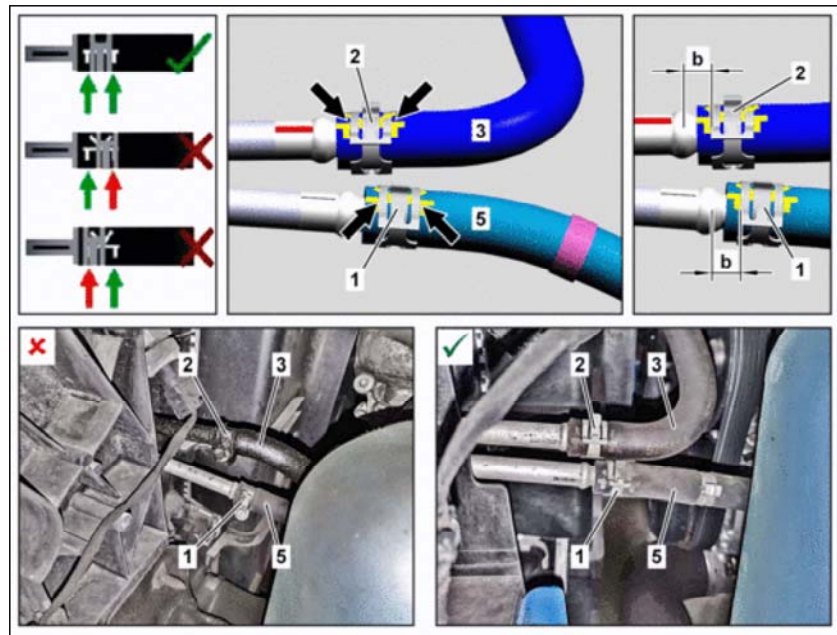


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

Shown on model 906

- | | | | |
|---|-------------|---|-----------------------|
| 1 | Clip | 5 | Low-pressure hose |
| 2 | Clip | 8 | Air ducting |
| 3 | Return hose | a | Dimension (2 to 4 mm) |
| 4 | Clip | | |

- | | |
|---|-----------------------|
| 1 | Clip |
| 2 | Clip |
| 3 | Return hose |
| 5 | Low-pressure hose |
| b | Dimension (2 to 7 mm) |



D46.25-A009-76

 Warning	Risk of injury to skin or eyes from hydraulic fluid spraying out under pressure. Risk of poisoning from swallowing hydraulic fluid.	Depressurize hydraulic system completely before starting any work on it. Wear protective clothing and safety glasses.	AS00.00-Z-0013-01A
 Warning	Risk of accident from vehicle starting off by itself when engine running. Risk of injury (bruises and burns) resulting from working on the engine while it is being started or when it is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A
Topical note	Notes on avoiding damage through contamination and foreign objects		AH00.00-P-5000-01A
	Check		
1	Check, whether the vehicle is affected by the measure.	 For authorized Mercedes-Benz service partners, only the entry in the Extended VEGA Application (EVA) system, in the "Current" tab, is decisive. An additional test of the affected vehicles in the workshop information system (WIS) or vehicle list is thereby not necessary.	
2	Remove air ducting (8).		
3	Check hydraulic hoses and clamps (1, 2) of power steering.	 Check the following points: → Check both connections of hydraulic lines for leak tightness. → Check installation position of clamps (1, 2) on respective hydraulic hose. The clamps must be seated centrally between the markings (arrows) on the hoses. Also check whether the distance indicated by dimension (b) is maintained. See specification in picture. If clamps (1, 2) are not correctly positioned or if there is a leakage (see fail image above), ↓ replace affected clamp (1, 2). To do so, see operation step 5 onward in reference document. Replace clamps on hydraulic hoses of power steering (code: NV3LETULPE, acc. no.: 46 950 79)	Page 6

 **Steering**



Number	Designation	Model 906	Model 907 with code ZG1 (Engageable all-wheel drive) or with code ZG3 (Engageable all-wheel drive with gear reduction)
BF46.00-N-1001-01A	Steering gear oil	Filling capacity Sheet	Liter ≈1,0
		BB00.40-P-0236-03A	BB00.40-P-0236-03A

Repair materials

Number	Designation	Order number
BR00.45-Z-1028-04A	Assembly cleaner	A 000 986 56 01

Parts ordering note

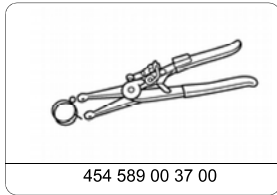
Part no.	Designation	Quantity
N 000000 000665	Clamp (low-pressure hose to oil cooler hydraulic line / return hose to oil cooler hydraulic line) *IF REQUIRED*	n. B.

SM46.25-D-0031-02SG	Replace clamps on hydraulic hoses of power steering (code: NV3LETULPE, acc. no.: 46 950 79)		
 Warning	Risk of injury to skin or eyes from hydraulic fluid spraying out under pressure. Risk of poisoning from swallowing hydraulic fluid.	Depressurize hydraulic system completely before starting any work on it. Wear protective clothing and safety glasses.	AS00.00-Z-0013-01A
 Warning	Risk of accident from vehicle starting off by itself when engine running. Risk of injury (bruises and burns) resulting from working on the engine while it is being started or when it is running.	Secure vehicle to prevent it from starting off by itself. Wear closed and snug-fitting work clothes. Do not touch hot or rotating parts.	AS00.00-Z-0005-01A

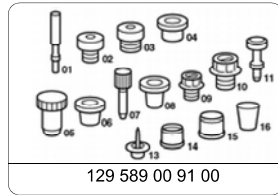
- Model 906 with engine 642**
with code ZU7 (National version for Canada)
- Model 906 with engine 642**
with code ZU8 (National version for USA)
- Model 906 with engine 651**
with code ZU7 (National version for Canada)
- Model 906 with engine 651**
with code ZU8 (National version for USA)
- Model 907 with engine 642**
with code ZG1 (Engageable all-wheel drive)
with code ZU7 (National version for Canada)
- Model 907 with engine 642**
with code ZG1 (Engageable all-wheel drive)
with code ZU8 (National version for USA)
- Model 907 with engine 642**
with code ZG3 (Engageable all-wheel drive with gear reduction)
with code ZU7 (National version for Canada)
- Model 907 with engine 642**
with code ZG3 (Engageable all-wheel drive with gear reduction)
with code ZU8 (National version for USA)

Nm Hydraulic power steering

Number	Designation	Model 900, 906	Model 907 with code ZG1 (Engageable all-wheel drive) Model 907 with code ZG3 (Engageable all-wheel drive with gear reduction)
BA46.25-N-1001-04H	Screw clamp, low-pressure hose/return hose line to power steering system cooler	Nm 5	5



Hose clamp pliers



Record plug

Repair materials

Number	Designation	Order number
BR00.45-Z-1028-04A	Assembly cleaner	A 000 986 56 01



The following operation steps are shown on engine 651 and must be performed in the same way when working on engine 642.

Reposition screw clamp (4) on power steering expansion reservoir

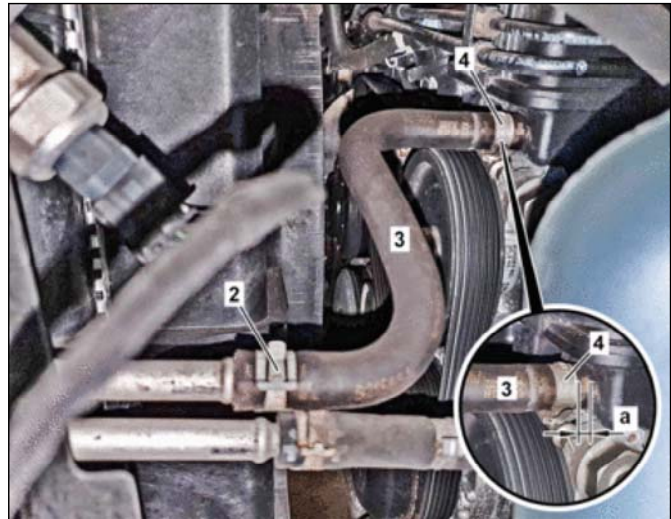


Only perform operation steps 1 to 4 if clamp (4) on power steering expansion reservoir has to be repositioned.

- 1 Loosen screw clamp (4) and slide along return hose (3).
- 2 Clean possible soiling at connection on power steering expansion reservoir.



Use a lint-free rag and cleaner.



D46.25-A010-81

- 3 Slide return hose (3) up to end position on connection of power steering expansion reservoir.

- 4 Slide screw clamp (4) onto return hose (3) and secure.



Tighten screw clamp (4) to a maximum torque of 2.5 Nm.

Otherwise the power steering expansion reservoir can be damaged.



The screw clamp (4) must be positioned, as shown, between the vertical lines of the marking (yellow marking in picture) on the return hose (3).

If vertical lines or marking on return hose (3) are no longer visible,



position screw clamp (4) as per dimension (a).




Dimension (a) must be approx. 2 to 4 mm and is measured between the screw clamp (4) and the end of the return hose (3).

Replace clamp on a hydraulic hose of power steering

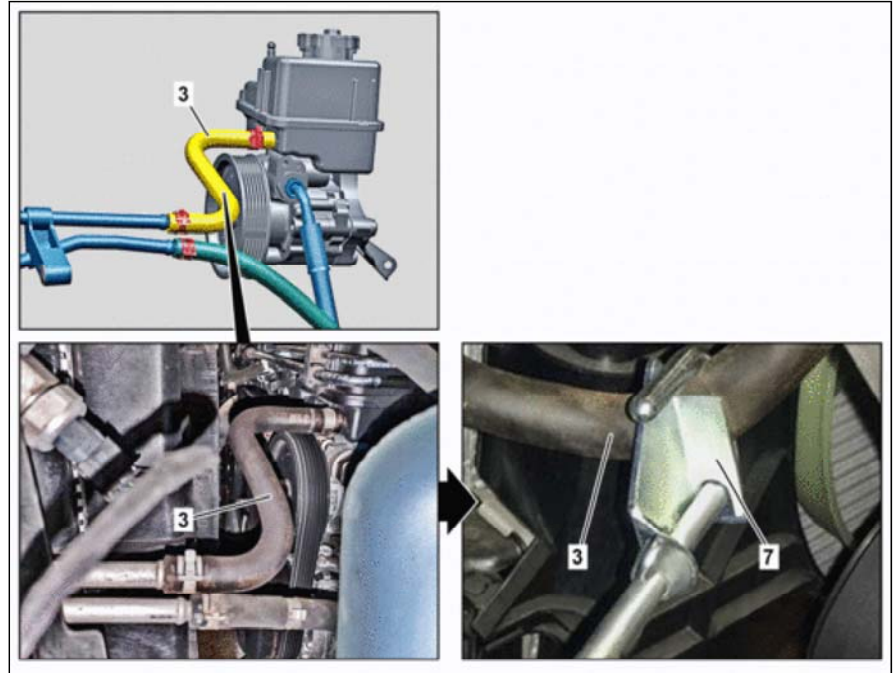


The following operation steps are shown, for example, at the connection between the return hose (3) and the hydraulic line (6). If it is necessary to replace the second clamp on the power steering oil cooler, the operation steps given below must be performed in the same way.


- 5 Clamp off return hose (3) using  hose clamp pliers (7).



In order to reduce the amount of hydraulic fluid discharged.

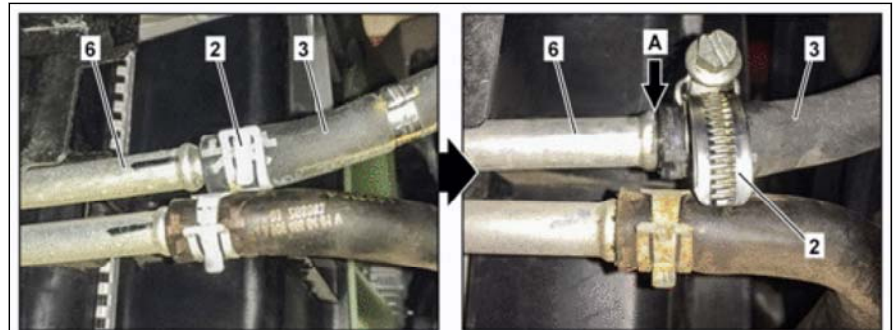


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- 6 Release spring bracket clamp (2) with  hose clamp pliers and slide along return hose (3).




The spring bracket clamp (2) can also be a screw clamp.

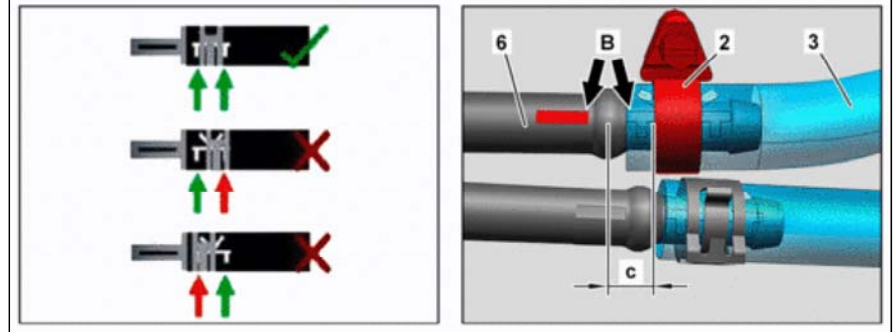


- 7 Remove return hose (3) from hydraulic line (6).



Collect escaping hydraulic fluid with an absorbent rag.

Plug openings.  Use a set of stop plugs.



D46.25-A007-76

- 8 Clean connection on hydraulic line (6).



Use a lint-free rag and cleaner.

- 9 Clean inside of return hose (3).



Use cleaner.

10 Dispose of spring bracket clamp (2) and replace with screw clamp (2).
If a screw clamp (2) was installed,
↓
Replace screw clamp (2).

11 Position new screw clamp (2) on return hose (3).

12 Attach return hose (3) at end position (arrow A) on connection of hydraulic line (6).



Align marking (arrow B) of return hose (3) with marking on connection of hydraulic line (6).

13 Slide screw clamp (2) onto return hose (3) and secure **Nm**.



The screw clamp (2) must be positioned, as shown, between the vertical lines of the marking on the return hose (3).

If vertical lines or marking on return hose (3) are no longer visible,



position screw clamp (2) as per dimension (c).



Dimension (c) must be approx. 3 to 5 mm.

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Remove hose clamp pliers (7) from return hose (3).