

Humming noises in drivetrain in area of rear axle when cornering

Topic number	LI35.31-P-066469
Version	8
Function group	35.31 - Rear axle center assembly
Date	3/12/25
Validity	Affects ALL 167 Chassis Only affects other vehicles in the production period from 06.04.2017 to approx. 30.06.2017
Reason for change	Update for no cases needed

Complaint

Possible humming noises from the drivetrain in the area of the rear axle, especially during tight cornering in the lower speed range.

Attachments	
File	Description
Glc diff.mp3	Reference file (humming noises from the rear axle differential).
Mein Film.mp4	Reference file (humming noises from the rear axle differential).

Cause

Additives in rear axle differential oil

Remedy

Note:

Please follow the instructions in this document. The replacement of components (other than those named for processing) is not effective.

Remedy:

A test drive must be performed. For accurate analysis (localization) of the noise, the "Steelman Chassis Ear" noise diagnosis kit can be used, for example.

If the rear axle differential is unambiguously identified as the cause (noise source), the oil must be replaced. Observe the following:

1. Warm up the oil in the differential by means of a short test drive.
2. Drain the oil from the differential and fill it with new oil according to the parts list in the attachment. Please follow the procedure described in AR.35.31-P-0523OLC.

XENTRY Tips

Note: To ensure that the differential is drained as completely as possible, both rear wheels should be rotated slowly 2-3 turns while draining. Make sure that as little residual oil as possible remains in the differential.

3. Please advise the customer that in isolated cases the problem may continue to occur for another 30 to 60 miles after the oil has been replaced.

If the problem is still present after the appropriate mileage:

- Double check the appropriate mileage was driven.
- Repeat the flushing and filling procedure a second time, make sure to properly flush all the diff fluid out
- If no change after the second flush and additional mileage. replace the rear diff

Disclaimer

NOTE: The information contained in this document is intended for use by trained, professional technicians with the knowledge to properly and safely perform diagnosis and repairs on Mercedes-Benz vehicles, using Mercedes-Benz approved tools and equipment. It informs service technicians about conditions that could occur in certain vehicles and provides information that could assist in proper vehicle diagnosis, service, or repair. It does not indicate that a defect is present in any vehicle referenced in this document nor does it imply warranty coverage. DO NOT assume that a symptom or condition, or a described cause of a symptom or condition, affects any particular vehicle or groups of vehicles, or that a described repair applies to any particular vehicle or groups of vehicles. There can be multiple causes resulting in the same or similar symptoms or conditions described in this document, and trained professional service technicians must use their diagnostic skills to make evaluations on a case-by-case basis. The information contained in this document does not guarantee warranty coverage nor does it extend the vehicle's warranty in any way.

Symptoms

Power transmission > Noises > Humming/droning

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A0019898803	09		Mobilube FE Plus NG 75W-85	ca.0,8-0,9l	AR.35.31-P-0523OLC, only hypoid oils as per specification MB 239.71 are to be used (A 001 989 88 03 corresponds to Mobilube FE Plus NG 75W-85)	
A3529970032			Screw plug	2		X
A0029892371			Omnifit 100H sealant (50g)	geringe Menge	See AR.35.31-P-0523OLC	

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
350000	OIL CHANGE AT REAR AXLE DIFFERENTIAL	Up to 0.5hr	35001G6	requires separate punch
009151	ROAD TEST			separate time punch with in/out miles