

Throttle lift-off clunking noises at drive shafts of front axle

Topic number	LI33.30-P-056665
Version	10
Function group	33.30 - Final drive, differential, drive shaft
Date	5/21/25
Validity	Models: All Mercedes-Benz cars with front-wheel drive and 4x4 vehicles
Reason for change	Validity adjusted

Complaint

Single throttle lift-off clunking noise from the side shaft when moving off (audible at the outboard end). The clunk is heard once when changing from forward to reverse (and vice versa).

Note: Sound file in attachment

Attachments	
File	Description
Beanstandung Lastwechselknacken.mp3	Sound recording of complaint

Cause

If the complaint is eliminated by experimentally loosening the outboard collar nut (by 1 turn), the problem is due to micromovement in the connection between the wheel bearing inner race and the joint housing of the side shaft.

Note: The collar nut must always be replaced after being loosened and must be tightened to the specified torque.

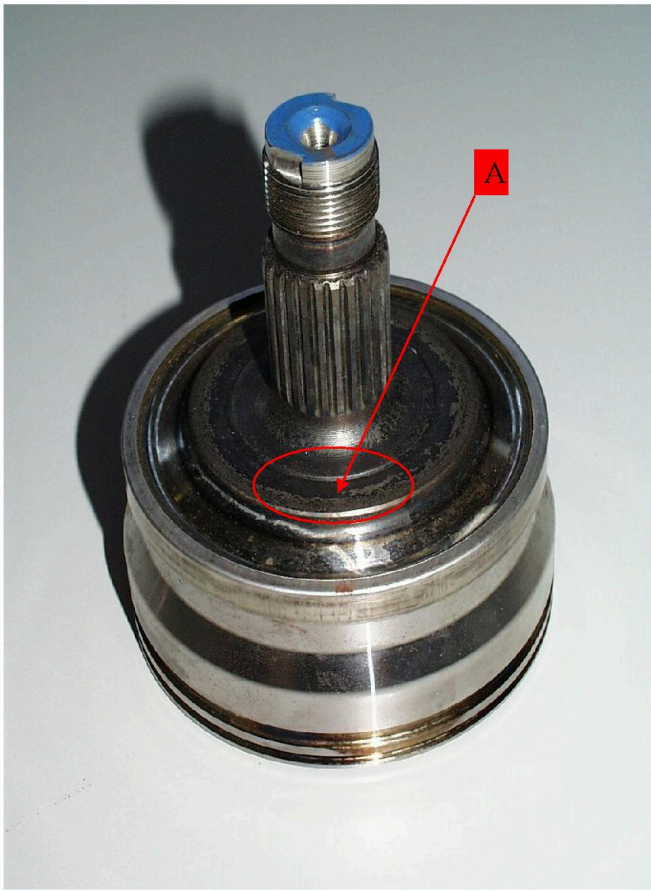
Remedy

Coat contact surface of side shaft with wheel bearing with Molykote paint. To do this, proceed as follows:

1. Remove outboard side shafts (extract outer joint gearing from wheel hub)
2. Clean contact surface A (see image file in attachment "Outer joint housing before") before coating with Molykote, using "spirit" (free of dust and grease)
3. Coat contact surface A (see image file in attachment "Outer joint housing after") using Molykote and leave to dry for one hour in removed condition
4. Reinstall side shafts

Note: Before using the antifriction coating (Molykote), stir it or shake it thoroughly for (at least 1 minute).

Attachments	
File	Description
Gelenkgehäuse aussen vor.jpg	Before coating with Molykote paint



Gelenkgehäuse aussen nach.jpg

After coating with Molykote paint



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

Chassis/suspension > Noises > Cracking

Power transmission > Noises > Throttle lift-off clunking noise

Power transmission > Drive shaft > Axle shaft > Noises > Knocking/banging

Chassis/suspension > Axle > Front axle > Noises > Cracking

Parts

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A0009890152	10		Low-friction paint (Molykote)	1		X

XENTRY Tips

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
330000	REMOVE/INSTALL PARTS OF LEFT FRONT AXLE SHAFT.		33H1034	Left side shaft
330000	REMOVE/INSTALL PARTS OF RIGHT FRONT AXLE SHAFT.		33W1034	Right side shaft
330000	REMOVE/INSTALL PARTS OF FRONT AXLE SHAFTS (BOTH)			Left and right side shafts