

Squeaking noise from the electric power steering

Topic number	LI46.35-P-076566
Version	3
Function group	46.35 - Electrical steering
Date	3/10/25
Validity	Model series 206 (Left-hand drive vehicle, with code M005) up to production 09/2023 Model series 214 (Left-hand drive vehicle, with code M005) up to production 09/2023 Model series 223 (Left-hand drive vehicle, with code M005) up to production 09/2023 Model series 254 (Left-hand drive vehicle, with code M005) up to production 09/2023 Model series 236 (Left-hand drive vehicle, with code M005) up to production 09/2023 Model series 232 (Left-hand drive vehicle) up to production 09/2023 Model series 294 (Left-hand drive vehicle) up to production 12/2024 Model series 295 (Left-hand drive vehicle) up to production 12/2024 Model series 296 (Left-hand drive vehicle) up to production 12/2024 Model series 297 (Left-hand drive vehicle) up to production 12/2024
Reason for change	Part numbers adapted
Reason for block	Results of endurance test still pending

Complaint

A squeaking noise comes from the electric power steering; see video with example.

Attachments	
File	Description
BR223 Noise EPS.mp4	Squeaking problem


Cause

Toothed rack in the area of the screw drive of the electric power steering needs additional grease.

Remedy

1. Lift the vehicle and remove the center engine compartment lining; for basic data, see WIS AR61.20-P-1105S
2. Loosen the bellows of the electric power steering on the right of the steering gear and slide outward on the tie rod – the tie rods do not need to be removed! For basic data, see WIS AR46.40-P-9998S
3. Turn the wheels fully to the right. The screw drive of the rack-and-pinion steering becomes visible. See picture 1 of screw drive
4. Clean the screw drive with a clean cloth and remove the existing grease. See picture 2 of cleaned screw drive
5. Prepare a clean brush for greasing the screw drive and, if necessary, mask off the metal sleeve of the brush or similar components to avoid damage to the steering housing or to the screw drive of the toothed rack. See picture 3 with example brush
6. Apply a sufficient amount of long-life grease (A001 989 84 51 09) to the screw drive of the toothed rack with the brush, making sure that this is applied evenly all around; see picture 4 of greased screw drive
7. Reinstall the steering bellows, making sure to replace the inner clamp!
Important: The contact surfaces of the bellows and the rack-and-pinion steering should be coated with a thin layer of Renolit (Renolit CX-FO 20, A094 989 38 00 11). For basic data, see WIS AR46.40-P-9998S
8. Move the rack-and-pinion steering several times from one steering limitation to the other to ensure that the grease is evenly distributed in the housing.
9. Assemble in the reverse order.

Attachments

File	Description
Bild 1 Gewindetrieb.JPG	Picture 1, screw drive
	
Bild 2 Gewindetrieb gereinigt.JPG	Picture 2, cleaned screw drive

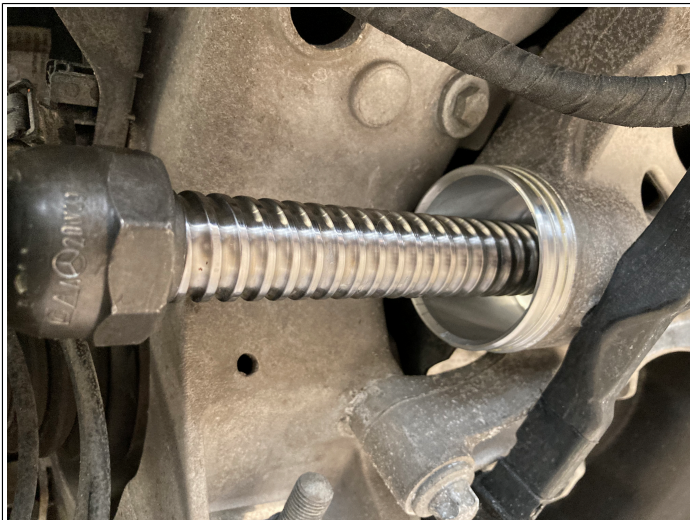


Bild 4 Gewindetrieb gefettet.JPG

Picture 4, greased screw drive



Bild 3 Beispiel Pinsel.jpg

Picture 3, example brush



WIS-References		
Document number	Title	Note
AR46.40-P-9998S	Remove/install boot	Tie rods do not need to be removed!
AR61.20-P-1105S	Remove/install center engine compartment lining	-

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 > Steering system > Noises > Dragging/squealing
Parts

XENTRY Tips

Part number	ES1	ES2	Designation	Quantity	Note	EPC
-			Brush	1		
A0949893800	11		Complex grease	1	1 unit is enough for several vehicles	X
A0019898451	09		Long-life grease	1	1 unit is enough for several vehicles	X

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
			4602A01	