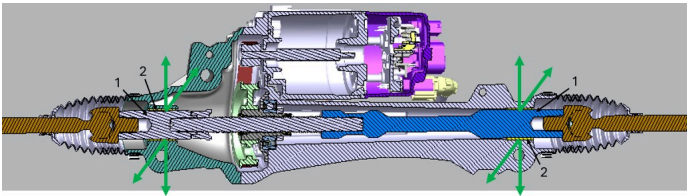


Knocking noise from rear axle steering when driving on uneven roadway

Topic number	LI46.80-P-079280
Version	6
Function group	46.80 - Auxiliary rear axle steering, auxiliary steering axle (ZL), electro-hydraulic auxiliary steering (EHZ)
Date	3/27/26
Validity	Model 223, 294, 295, 296, 297 with code 201 (Rear axle steering) or with code 216 (Rear axle steering with large angle)
Reason for change	Unable to open in PDF

Complaint

Rattling/knocking noise from the rear axle steering is audible when driving on rough terrain or cobblestones. Excessive radial play (green arrows) between the screw-on stud (1) and the plain bearing (2).

Attachments	
File	Description
BR297_Rear Rack.jpg	Rear Rack 297 Identification
	
Example Noise.mp4	Example Noise

Cause

Diverse functional play in the rear axle steering.

Remedy

1. Detach underfloor paneling under rear axle steering.
2. Remove heat shield.
3. Remove large clamps from left bellows.
4. Open small clamps on left using a suitable tool and slide to the side.
5. Slide bellows to the side.
6. A second person sits in the vehicle and, with the drive activated and the automatic transmission in the N position, turns the steering to left lock.

XENTRY Tips

Caution! Risk of trapping when steering at the same time! Do not move steering wheel during operation steps 7 and 8!

7. Remove grease from screw-on stud using a clean, lint-free rag.

=> Up to the area where the stud enters the bearing!

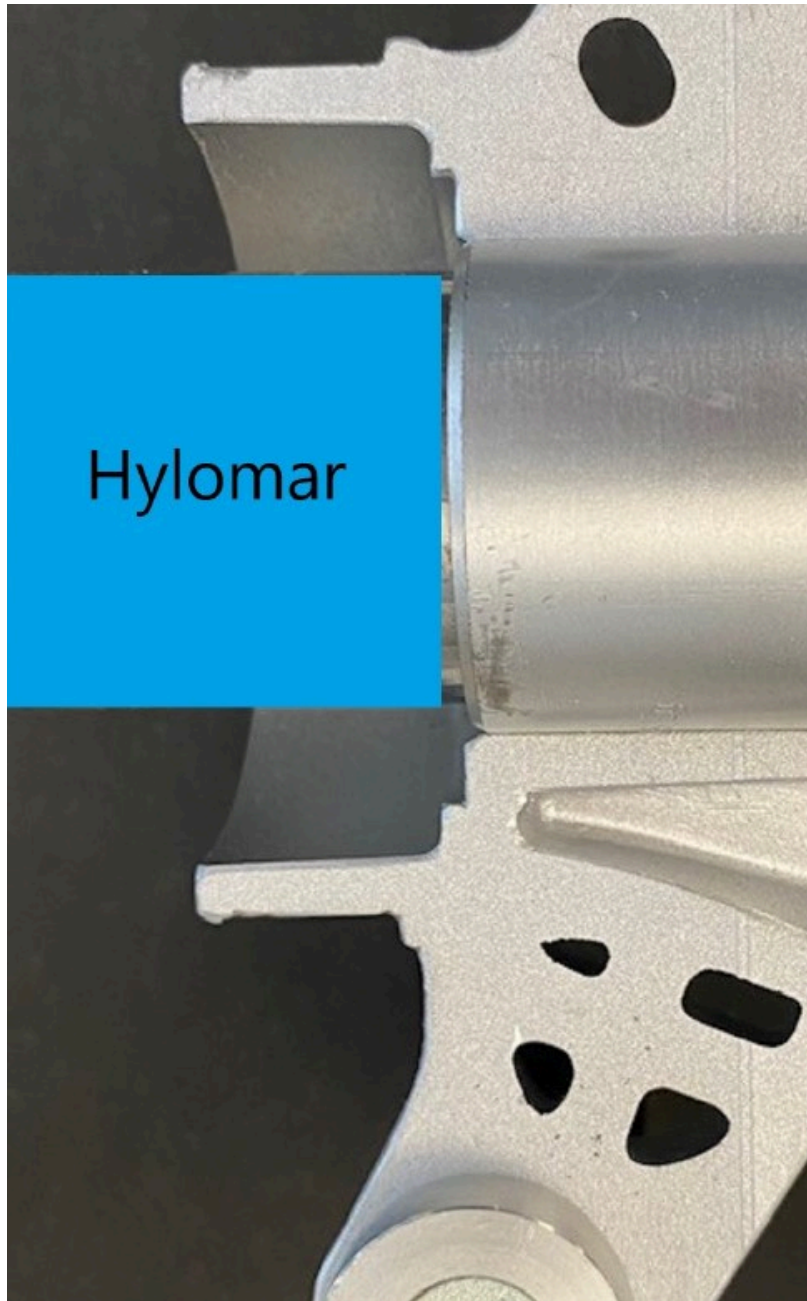
Then completely degrease the threaded stud using a lint-free cloth soaked in a suitable assembly cleaner (e.g., A 000 986 56 01); if necessary, clean hard-to-reach areas with the assembly cleaner.

=> Up to the area where the stud enters the bearing!

Important: The surface must be thoroughly cleaned and free of grease!

8. Then apply Hylomar (A 001 989 25 20 09) around the degreased screw-on stud using a new brush.

=> Up to the area where the stud enters the bearing!



9. Move steering wheel from end stop to end stop 1-2 times. Then, turn the steering to the left lock again.
Warning! Risk of trapping when steering at the same time!
10. Apply Hylomar a second time.
11. Move steering wheel from end stop to end stop 1-2 times. Then, turn the steering to the right lock.

Warning! Risk of trapping when steering at the same time!

12. Bellows installation: Coat contact surfaces of bellows and rack-and-pinion steering lightly with Renolit (A094 989 38 00). When doing so, ensure that the grease is underneath the edges of the bellows.

Replace large clamps (A 001 995 15 35). The small clamp can be reused.

13. Repeat operation steps 3 to 5 on the other (right) side.
14. Then repeat operation steps 7 to 12 for the screw-on stud on the other side.
15. Attach heat shield.
16. Attach underfloor paneling.

XENTRY Tips


17. When relocating the vehicle on the premises, please use Snow Chain Mode through the head unit to limit speed so Hylomar application stays in place.
18. Leave the Hylomar to dry for approx. 90 minutes.

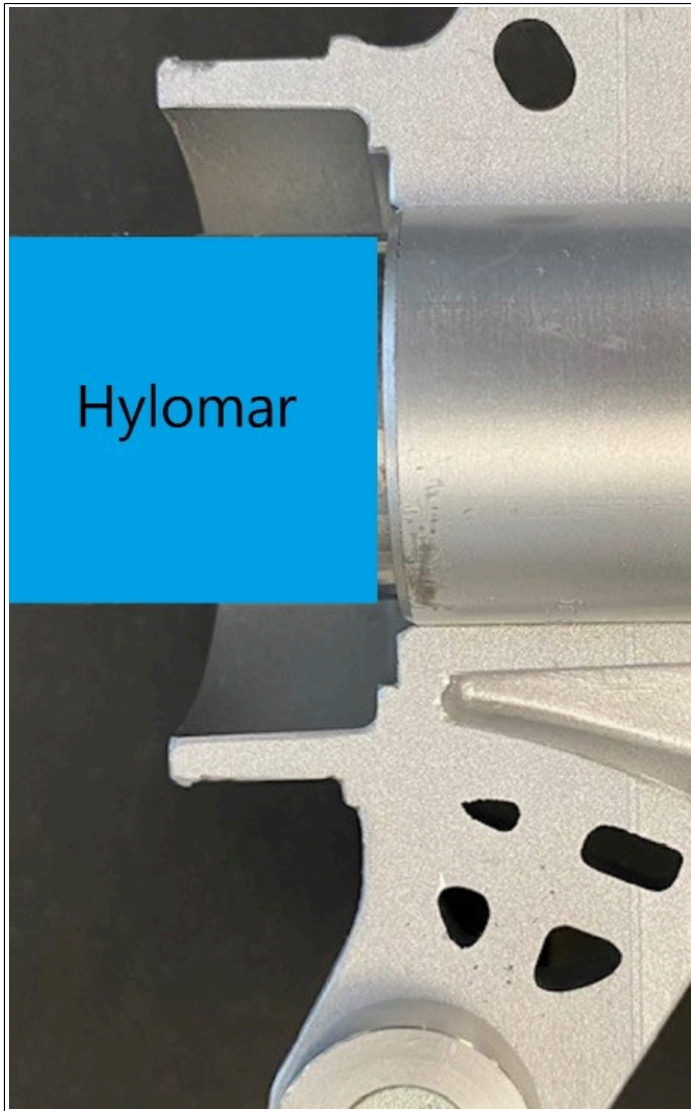
Note: Deactivate Snow Chain Mode after stopping the vehicle!

19. Then perform a test drive.

If the remedies are not effective => please create a TIPS case to the Body/Chassis/Entertainment with the following information:

- Complete history of the rear axle steering with mileage and repair date along with what was completed (application of Hylomar, replacement of the rear axle steering).
- Clear video or audio file of the complaint as perceived by the customer (without amplification via Chassis Ear or similar devices and not on the shock absorber test stand).

Attachments	
File	Description
Hylomar.jpg 	Hylomar Application Example
Cross Section of Hylomar Application Area.jpg	2D View of Application Area



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 > Function > Too much play/clearance
Chassis/suspension > Steering system > Rear axle steering (HAL) > Noises > On rough road
Parts

XENTRY Tips

Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 000 986 56 01			Assembly cleaner/assembly power cleaner	1	Must be degreasing	X
A001 989 25 20	09		Hylomar (100 g)	1		X
A001 995 15 35			One-ear clamp	2		X
A094 989 38 00	11		Complex grease (e.g. Renolit CX-EP 2)	1	As required and is sufficient for several veh.	X

Operation numbers/damage codes

Op. no.	Operation text	Time	Damage code	Note
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