

M274 poly-V belt squeaking noises, falls off, not aligned, broken

Topic number	LI13.22-N-078825
Version	1
Function group	13.22 - Single-belt drive
Date	1/24/25
Validity	447 and 907 with engine M274
Reason for change	

Complaint

- Squeaking noises from the belt drive (see example sound file in attachment).
- Not centered on pulley.
- Falls off.
- Broken

Attachments	
File	Description
belt_noise.mp3	Poly-V belt example sound file

Cause

Premature wear of poly-V belt and incorrect positioning of alternator.

Remedy

In case of noise complaints from the belt drive, proceed as described below:

1. Release and remove poly-V belt, see AR13.22-D-1202TSC (447) or AR13.22-S-1202EG (907) operation steps 1 to 6.
2. Remove alternator bolts
3. Push back alternator centering bushing
4. Install alternator without stress. To do so, position upper bolt and tighten to rated torque (rated torque see AR15.40-S-5032-03EG (447) or AR15.40-D-5032-03TSC (907)).
5. Then tighten lower bolt on alternator (rated torque see AR15.40-S-5032-03EG (447) or AR15.40-D-5032-03TSC (907)). To ensure that the alternator is correctly positioned the specified tightening sequence must be observed.
6. Install new poly-V belt, for routing diagram of poly-V belt see AR13.22-D-1202TSC (447) or AR13.22-S-1202EG (907).

Note:

Always refer to XENTRY parts information for the latest parts information.

WIS-References		
Document number	Title	Note
AR13.22-S-1351E	Check poly-V belt for wear and damage	
AR13.22-S-1202EG	Remove/install poly-V belt	Model 447
AR13.22-D-1202TSC	Remove/install poly-V belt	Model 907
AR15.40-S-5032EG	Remove/install alternator	Model 447
AR15.40-S-5032-03EG	Alternator tightening procedure	Model 447
AR15.40-D-5032TSC	Remove/install alternator	Model 907
AR15.40-D-5032-03TSC	Alternator tightening procedure	Model 907

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 generation > Engine noise > Noise
Power generation > Mechanical engine components > V-belt > Damage
Power generation > Mechanical engine components > V-belt > Voltage too low
Power generation > Mechanical engine components > V-belt > Noise

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			2024036	
155030	ALTERNATOR & BELT R&R			See additional operation items depending on vehicle equipment