

Rattling noise from turbocharger

Topic number	LI09.40-P-061542
Version	7
Function group	09.40 - Turbocharger
Date	6/16/21
Validity	All models with engine 276DELA, including AMG Entry Performance models
Reason for change	Now including AMG Entry Performance types

Complaint

Rattling engine noise under partial load.

Attachments	
File	Description
M276DELA Wastegate.MP3	Rattling noise from wastegate

Cause

The valve disk of the wastegate in the turbocharger vibrates in the valve seat when the wastegate is slightly open (partial load operation) and causes a rattling noise.

Mercedes-Benz models:

The valve disk of the wastegate in the turbocharger vibrates in the valve seat when the wastegate is slightly open (partial load operation), possibly causes a rattling noise.

Mercedes-AMG models (Entry Performance):

The valve disk of the wastegate in the turbocharger vibrates due to contact to its arm in the opened position, possibly causing a rattling noise.

Remedy

The noise is normal for the current production configuration; there is no damage.

The turbochargers are technically OK and must not be replaced.

Mercedes-Benz models:

The actuation of the wastegate can be changed via Xentry so that it remains closed for longer in partial load operation. For this, the AO code 31O (letter O) must be added via Xentry and then SCN coding of the engine control unit must be performed.

Note:

XENTRY TIPS

The change in the actuation can lead to slight hissing noises from the turbocharger.

Important notice regarding vehicle model 231:

For model 231 prolonged closing of the wastegate is active ex factory. SCN-coding with code 31O leads to regular closing of the the wastegate. Therefore code 31O should not be used on model 231.

Mercedes-AMG models (Entry Performance):

The pressure and actuation conditions of the AMG models differ from those of MB models. Thus the change of the wastegate actuation is not an option on AMG models. The noise is normal for the current production configuration; no parts must be replaced.

Symptoms
Power generation > Engine noise > Noise

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
54-065	12V			
54-101	QUICK TEST			
540992	PERFORM SCN CODING IN ENGINE CONTROL UNIT (WITH XENTRY/DAS CONNECTED)		0930036	