

Rattling noise from turbocharger

Topic number	LI09.40-P-061542
Version	4
Design group	09.40 Turbocharger
Date	01-13-2017
Validity	All models with engine 276DELA
Reason for change	Rule change for model 231 vehicles
Reason for block	

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 may vibrate in the valve seat when the wastegate is slightly open (partial load operation), 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.

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

Important notice regarding vehicle model 231:

for type 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.

Symptoms
Power generation / Engine noise / Rattling

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note

XENTRY TIPS

02-4762	CONNECT/DISCONNECT DIAGNOSIS SYSTEM (XENTRY/DAS)			
02-5058	CONNECT/DISCONNECT BATTERY CHARGER (XENTRY/DAS CONNECTED)			
54-0992	PERFORM SCN CODING IN ENGINE CONTROL UNIT (WITH XENTRY/DAS CONNECTED)		09300 36	

Validity		
Vehicle	Engine	Transmission
*	276.850	*
*	276.826	*
*	276.823	*
*	276.824	*
*	276.825	*
*	276.821	*
*	276.820	*