

Whistling or Squeaking Noise in Engine Compartment From Drive Belt Area

Topic number	LI01.20-P-066784
Version	1
Design group	01.20 Crankcase ventilation, cylinder head cover
Date	07-20-2017
Validity	All vehicles with M133
Reason for change	
Reason for block	

Complaint:

Whistling or squeaking noise in engine compartment from drive belt area.

Cause:

Crankcase ventilation system, various causes

Remedy:

1. Check engine oil level; correct if necessary

NOTE:

If the engine oil level is too high, this can result in the crankcase ventilation system to not function properly.

The crankcase ventilation system must be cleaned as necessary or replaced if required

2. Check crankcase ventilation system for clogging; replace if necessary

- Detach full-load bleed line (A) at top (figure 1)
- Check whether a vacuum is produced at the connection during engine operation / idle and whether the noise changes when the connection is closed (by hand) => no vacuum / no change in noise => line probably clogged
- Engine OFF, apply pressure to cylinder crankcase (via dipstick), max. 0.1 bar and check whether the full-load bleed line is open / clear, i.e. whether oil is discharged
- Detach vent line (B) from connection of cylinder crankcase (figure 2)
- Detach full-load ventilation from oil separator (C) (EU variant) and close off line (figure 3)
- Apply pressure to full-load bleed line (position of adapter plate connection upstream of compressor) and check whether vent line is clear. => not clear => replace full-load bleed line (EU variant), replace oil separator, full-load and partial-load bleed line (US variant)

3. Check front radial shaft sealing ring; replace if necessary

NOTE:

If the crankcase ventilation system is not functioning, the pressure will find a different path. The preferred path is via the front crankshaft radial sealing ring (the sealing lip folds over).

XENTRY TIPS

The crankshaft radial sealing ring must always be checked and replaced if necessary

Attachments	
File	Description
Abbildung_1.JPG	Figure 1
Abbildung_2.JPG	Figure 2
Abbildung_3.JPG	Figure 3

Symptoms
Power generation / Engine noise / Howling
Power generation / Engine noise / Squeals
Power transmission / Noises / Howling/whistling
Power generation / Engine noise / Whistles
Power generation / Engine noise / Whirring

Parts						
Part number	ES1	ES2	Designation	Quantity	Note	EPC
A 016 997 01 46			Sealing ring	1	As required (see operation step 3)	X

Operation numbers/damage codes				
Op. no.	Operation text	Time	Damage code	Note
			03010 **	Please refer to TIPS document in dealer text

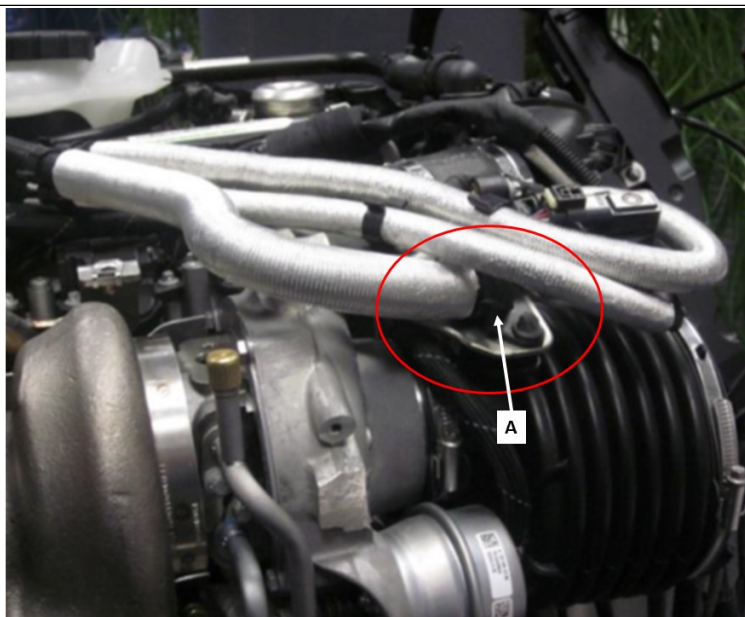
WIS-References			
Document number	Title	Note	Allocation
AP18.00-P-1811MP	Check engine oil level using vehicle oil dipstick	Re operation step 1	Remedy
AR01.20-P-0002MTA	Replace full-load housing ventilation	Re operation step 2	Remedy
AR03.20-P-3000MT	Replace front crankshaft radial sealing ring	Re operation step 3	Remedy

Validity		
Vehicle	Engine	Transmission
A (176) - 176.052	133.980	*
CLA (117) - 117.352	133.980	*
CLA (117) - 117.952	133.980	*
GLA (156) - 156.952	133.980	*

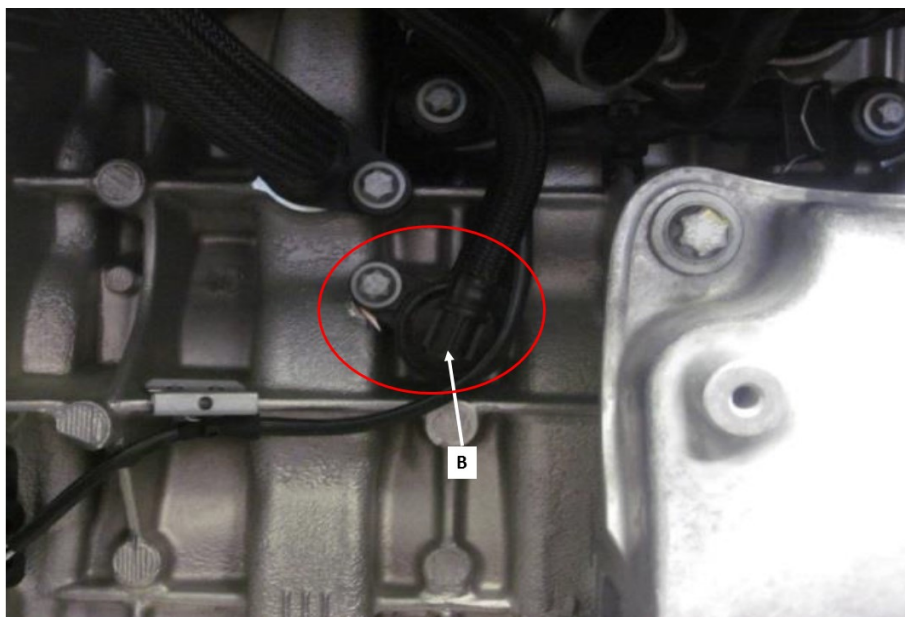
XENTRY TIPS

Attachments

Abbildung_1.JPG:



Abbildung_2.JPG:



XENTRY TIPS

Abbildung_3.JPG:

