

Blue smoke from exhaust after engine start

Topic number	LI09.40-P-055396
Version	2
Design group	09.40 Turbocharger
Date	02-12-2013
Validity	Vehicles with engine 271.8 EVO
Reason for change	Repair method changed. Installation of banjo bolt with integral valve
Reason for block	

Complaint:

Shortly after engine start a blue smoke can emerge from the rear muffler of the exhaust system.

Note:

The smoke cloud dissipates and does not necessarily reappear at every restart.

This can occur in some cases when a cold engine is started after the vehicle has been parked for several hours.

Cause:

When the engine is switched off, oil can continue to run out of the cylinder head via the oil feed line and can therefore seep into the bearing housing. In isolated cases capillary action can cause small residual oil quantities to travel to the turbine wheel and the V-clamp (refer to illustration in the attachments for location). After a long idle period this can lead to slight oil leakage at the V-clamp or to blue smoke problems when the cold engine is restarted.

Attachments	
File	Designation
V-clamp.JPG	V-clamp location

Remedy:

The turbocharger is technically OK and does not need to be replaced; it is sufficient to install a new banjo bolt with integral valve.

- 1.) Detach small shield of turbocharger (see attachment for installation location of bolts).
- 2.) Remove oil feed line in accordance with WIS document AR09.40-P-6020-13EVO steps 1, 2 and 3
- 3.) Replace previous banjo bolt with banjo bolt with integral valve A0019972401. Observe revised tightening torque: 6 Nm + 90°
- 4.) Install in the reverse order

Note: The banjo bolt must be renewed each time it is removed.

Attachments	
File	Designation
Screwings_turbocharger_screening_plate.jpg	Shield - Installation location of bolts

Symptoms
Power generation / Exhaust system / Exhaust system function / Exhaust gas causes pollution
Power generation / Engine lubrication/oil cooling / Engine lubrication/oil cooling leaks / External oil loss
Power generation / Exhaust system / Exhaust system function / Fumes/blue smoke

Power generation / Exhaust system / Exhaust system function / Fumes/white smoke

Power generation / Exhaust system / Exhaust system function / fumes/black smoke

Parts							
Part number	ES1	ES2	Designation	Quantity	Note	EPC	Other make part
A 001 997 24 01			Banjo bolt	1	Must be renewed each time it is unscrewed	X	
N 000000 006513			Sealing ring	2	Banjo bolt	X	
A 023 997 85 48			O-ring	1	Crankcase	X	

Work units				
Op. no.	Operation text	Time	Damage code	Note
18-9011	REMOVE/INSTALL OIL LINE (FEED LINE) AT TURBOCHARGER		18366 38	Please add note "Blue smoke" to damage coding

Validity		
Vehicle	Engine	Transmission
172.447	271.861	*
172.448	271.861	*
204.047	271.860	*
204.048	271.860	*
204.049	271.820	*
204.247	271.860	*
204.248	271.860	*
204.249	271.820	*
204.347	271.860	*
204.348	271.860	*
204.349	271.820	*
207.347	271.860	*
207.348	271.860	*
207.447	271.860	*
207.448	271.860	*
212.047	271.860	*
212.048	271.860	*
212.147	271.860	*
212.148	271.860	*
212.247	271.860	*
212.248	271.860	*

Attachments

Screwings_turbocharger_
screening_plate.jpg:

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1 Einbauanleitung Rückschlagventil | Axel Reinauer, Abteilung GSP/TPP | 31.01.2012

Mercedes-Benz

V-clamp.JPG:

