

## Blue smoke after engine start or slight oil leakage at turbocharger

|                   |                                |
|-------------------|--------------------------------|
| Topic number      | LI09.40-P-055396               |
| Version           | 6                              |
| Function group    | 09.40 Turbocharger             |
| Date              | 07-11-2018                     |
| Validity          | Vehicles with engine 271.8 EVO |
| Reason for change | Validity adjusted              |
| Reason for block  |                                |

### Complaint:

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

Slight oil leakage at turbine housing.

### Note:

This smoke cloud dissipates immediately 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 overflow onto the turbine wheel and V-clamp (connection of the two turbine housing halves). After a long idle period this can lead to slight oil leakage at the V-clamp or to blue smoke occurrence when the cold engine is restarted.

### Remedy:

If the problem reoccurs after installation of the banjo bolt, a PTSS case must be created and a video of the smoke cloud attached before further repairs are performed. The file size must not exceed 5 MB. 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 tightening torque as per WIS document AR09.40-P-6020-13EVO! (6 Nm + 90°)
- 4.) Install in the reverse order

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

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| Attachments                                |                                         |
|--------------------------------------------|-----------------------------------------|
| File                                       | Description                             |
| Screwings_turbocharger_screening_plate.jpg | Shield - Installation location of bolts |

| Symptoms                                                                        |
|---------------------------------------------------------------------------------|
| Power generation / Exhaust system / Function / Exhaust gas causes pollution     |
| Power generation / Engine lubrication/oil cooling / Leakage / External oil loss |

# XENTRY TIPS

|                                                                  |
|------------------------------------------------------------------|
| Power generation / Exhaust system / Function / Fumes/blue smoke  |
| Power generation / Exhaust system / Function / Fumes/white smoke |
| Power generation / Exhaust system / Function / fumes/black smoke |

| Parts           |     |     |              |          |                                           |     |
|-----------------|-----|-----|--------------|----------|-------------------------------------------|-----|
| Part number     | ES1 | ES2 | Designation  | Quantity | Note                                      | EPC |
| 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   |

| Operation numbers/damage codes |                                                                     |      |             |                                                                                                                     |
|--------------------------------|---------------------------------------------------------------------|------|-------------|---------------------------------------------------------------------------------------------------------------------|
| Op. no.                        | Operation text                                                      | Time | Damage code | Note                                                                                                                |
| 18-9011                        | REMOVE/INSTALL OIL LINE (FEED LINE) AT TURBOCHARGER                 |      | 18366 04    | The applicable work position must be selected according to the model. Please add note "Blue smoke" to damage coding |
| 18-9010                        | REMOVE/INSTALL, SEAL OIL FEED LINE FOR TURBOCHARGER, LOCATION:..... |      | 18366 04    | The applicable work position must be selected according to the model. Please add note "Blue smoke" to damage coding |

| Validity          |         |              |
|-------------------|---------|--------------|
| Vehicle           | Engine  | Transmission |
| C (204) - 204.047 | 271.860 | *            |
| C (204) - 204.048 | 271.860 | *            |
| C (204) - 204.049 | 271.820 | *            |
| C (204) - 204.247 | 271.860 | *            |
| C (204) - 204.248 | 271.860 | *            |
| C (204) - 204.249 | 271.820 | *            |
| C (204) - 204.347 | 271.860 | *            |
| C (204) - 204.348 | 271.860 | *            |
| C (204) - 204.349 | 271.820 | *            |
| E (207) - 207.347 | 271.860 | *            |
| E (207) - 207.348 | 271.860 | *            |
| E (207) - 207.447 | 271.860 | *            |
| E (207) - 207.448 | 271.860 | *            |
| E (212) - 212.047 | 271.860 | *            |
| E (212) - 212.048 | 271.860 | *            |
| E (212) - 212.147 | 271.860 | *            |
| E (212) - 212.148 | 271.860 | *            |

# XENTRY TIPS

|                       |         |   |
|-----------------------|---------|---|
| E (212) - 212.247     | 271.860 | * |
| E (212) - 212.248     | 271.860 | * |
| SLK/SLC 172 - 172.447 | 271.861 | * |
| SLK/SLC 172 - 172.448 | 271.861 | * |

Attachments

Screwings\_turbocharger\_  
screening\_plate.jpg:

Global Service & Parts



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