

Complaint - Cylinder Head Cover Near the Injector Holes Leaking: Subsequent Work on Cylinder Head (180/18)

Change overview:

Version	Date	Change
0	12/02/2019	First publication
1	01/08/2021	Checking for leaks at the solenoid hydraulic valve for valve lift control is no longer required
2	01/16/2021	Work procedure under Step 2.1 adapted.
3	02/21/2023	Order types added, invoicing updated
4	07/13/2023	Order types added

Vehicle Type: **Cayenne (9YA) / Cayenne Coupé (9YB) / Cayenne E-Hybrid (9YA) / Cayenne E-Hybrid Coupé (9YB) / Cayenne S (9YA) / Cayenne S Coupé (9YB)**

Model Year: **As of 2018**

Concerns: **Cylinder head cover**

Cause: **Complaint about injector hole leaks**

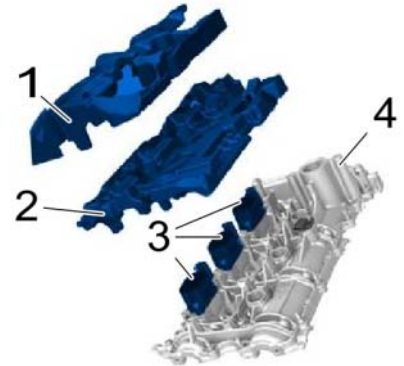


Information

- Due to a batch error in the casting procedure there may be cast residue in the cylinder head cover sealing groove.
- This cast residue may be the reason for leaks in the injector holes.

In the event of a complaint, the corresponding position of the leak(s) must be located **before doing any other work** and then rectified on a case-by-case basis, see section **"Work procedure"**.

Work Procedure: – **Cylinder head cover component overview:**



Cylinder head cover component overview

- 1 – Insulation on top of cylinder head cover
- 2 – Insulation on bottom of cylinder head cover
- 3 – Solenoid hydraulic valve for valve lift adjustment
- 4 – Cylinder head cover



Information

- Other electric plug connections and line guides must be disconnected to remove the cylinder head cover sound insulation.
- 1 **Identify the cause of the leak(s):**
 - 1.1 Remove air filter housing, see ⇒ *Workshop Manual '242519 Removing and installing air filter housing'*.
 - 1.2 Visually check whether both cylinder head covers have leaks, then continue on the relevant cylinder head with ⇒ 1.3.
 - 1.3 Remove insulation on top of the cylinder head cover.



Information

If the insulation on the top of the cylinder head cover is already soaked with oil, it must be replaced.

- 2 **Subsequent work on cylinder head:**
 - 2.1 Remove fuel collection pipe **and** fuel injectors on the affected cylinder head, see ⇒ *Workshop Manual '243019 Removing and installing fuel collection pipe (V6 Turbo)'* and ⇒ *Workshop Manual '244019 Removing and installing fuel injector'*.
 - 2.2 Remove insulation on bottom of the cylinder head cover.
 - 2.3 **Identify the affected cylinder(s) by a visual inspection:**

2.3.1 Oil must have collected in the vicinity of the injector of the affected cylinder and the insulation on the bottom of the cylinder head cover should be fully soaked.

⇒ *Fault type 2: Cylinder head cover leaking*

2.3.2 If all affected cylinders are identified, make a note of them and continue with ⇒ 2.4.

2.4 To remove cylinder head cover and dispose of old seal, see ⇒ *Workshop Manual '158219 Removing and installing cylinder head cover (V6 turbo)'*.

2.5 Clean cylinder head cover.

2.6 Check the sealing groove (⇒ *Cylinder head cover sealing groove -1-*) of the cylinder head cover visually. Be particularly meticulous when doing this especially in the vicinity of the affected cylinder.

2.7 Carefully remove any cast residue (⇒ *Cylinder head cover sealing groove -2-*) using a small flat screwdriver, ensuring that the sealing groove is not damaged. There must be no more cast residue in the sealing groove after machining (⇒ *Cylinder head cover sealing groove -3-*).

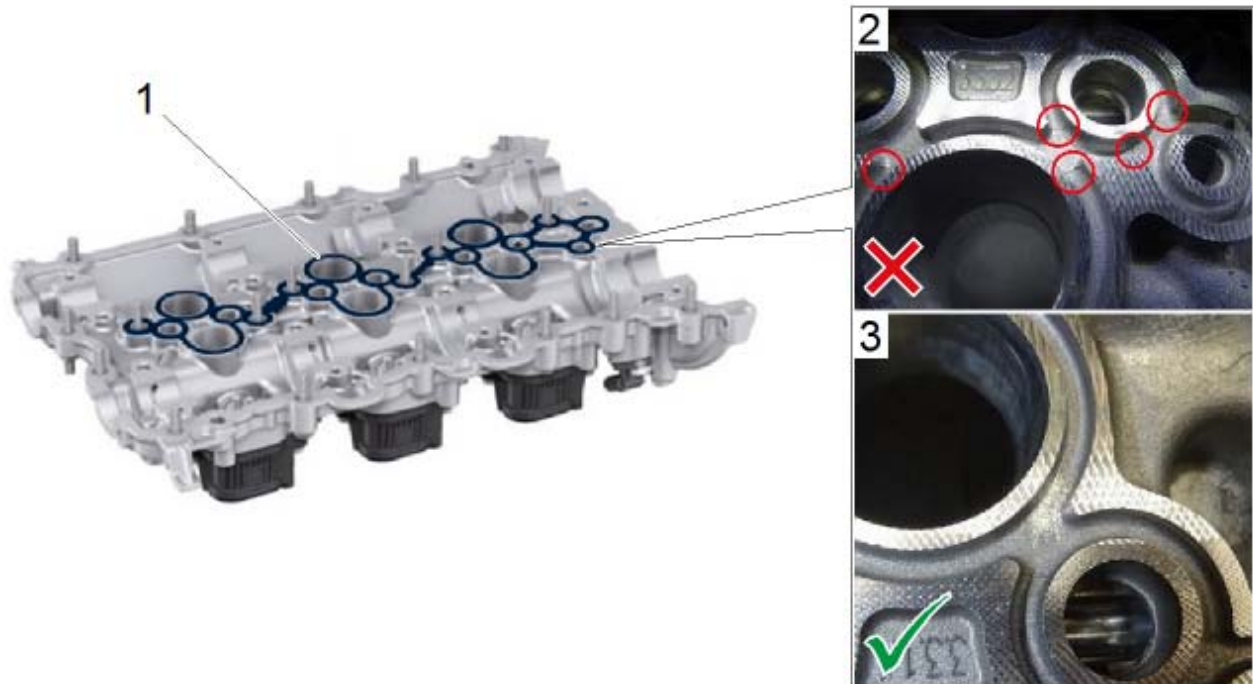
2.8 To install a new seal on the cylinder head cover, see ⇒ *Workshop Manual '158219 Removing and installing cylinder head cover (V6 turbo)'*.

2.9 Replace and install the insulation on the bottom of the cylinder head cover.

2.10 Install fuel collection pipe, see ⇒ *Workshop Manual '243019 Removing and installing fuel collection pipe (V6 Turbo)'*.



Fault type 2: Cylinder head cover leaking



Cylinder head cover sealing groove

3 Subsequent work:

- 3.1 Install insulation on top of the cylinder head cover.
- 3.2 Install air filter housing, see ⇒ *Workshop Manual '242519 Removing and installing air filter housing'*.

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
15824912	Reworking cylinder head cover cylinders 1-3	
15824911	Reworking cylinder head cover cylinders 4-6	
15824914	Reworking cylinder head cover cylinders 1-3	
15824913	Reworking cylinder head cover cylinders 4-6	

PCSS encryption:

Location (FES5)	15800	Cylinder head cover seal
Damage type (SA4)	5041	Oil/grease leak

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
15824922	Reworking cylinder head cover cylinders 1–3	
15824921	Reworking cylinder head cover cylinders 4–6	
15824924	Reworking cylinder head cover cylinders 1–3	
15824923	Reworking cylinder head cover cylinders 4–6	

PCSS encryption:

Location (FES5)	15800	Cylinder head cover seal
Damage type (SA4)	5041	Oil/grease leak

Labor position and PCSS encryption

Labor position:

APOS	Labor operation	I No.
15824912	Reworking cylinder head cover cylinders 1–3	
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15824923	Reworking cylinder head cover cylinders 4–6	

PCSS encryption:

Location (FES5)	15800	Cylinder head cover seal
Damage type (SA4)	5041	Oil/grease leak

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