Engine Oil Leak (123 / 15)

Oil leak on 2nd generation V6 diesel engine

Information
This Technical Information replaces the TI "Engine leaking in oil guide housing area Group 1, #10/15 dated February 12, 2015.

Vehicle Type: **Cayenne V6 Diesel 2nd generation (92A)**

Model Year: **As of 2012**

Subject: Component-related deviations can result in the following oil leaks:

1 Oil leak at the side of the oil guide housing, near the long fastening screws ⇒ 1

2 Oil leak via the fastening screws for the lower chain housing cover ⇒ 2

3 Oil leak via the thread of the fastening screws for the flywheel/drive plate in the crankshaft ⇒ 3

4 Oil leak via the crankshaft/flywheel sealing ring ⇒ 4

Concern: **Oil leak ("sweating", drops of oil) on engine in oil guide housing area** ⇒ *Example of oil leaks on the engine*

We have discovered that the cause of some leaks in the specified area could not be detected and determined definitively in the dealer organisation when attempting to resolve the complaint "Oil leak"[1]. As a result, some of the measures that were carried out were not always effective.

[1] Oil sweating, drops of oil

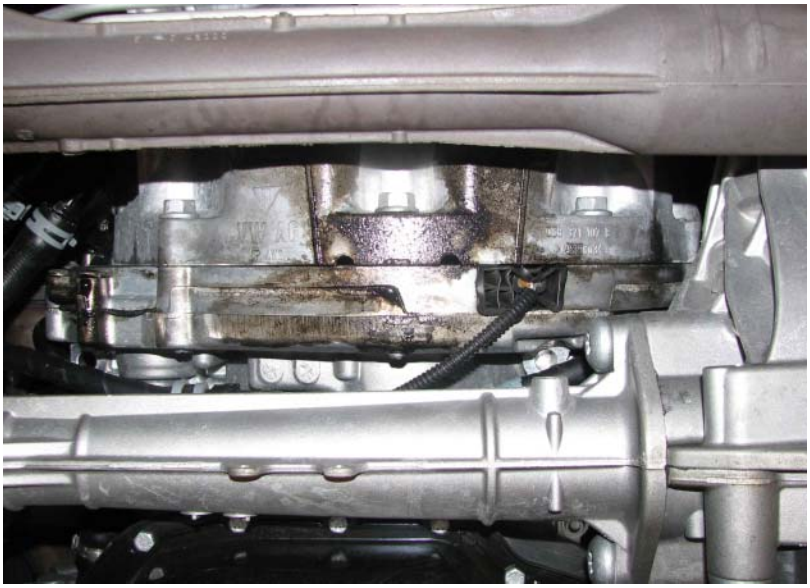
Proceed as follows in the event of a complaint:

Information
Test drive:

⇒ **Before doing any other work**, the oil leak/oil contamination area on the engine must always be cleaned and sprayed with a suitable leak-locating agent/leak detecting spray (commercially available).

Then, perform a test drive.
After the test drive, check the engine for oil leaks.

⇒ From past experience, we have discovered that the vehicle only needs to be driven a longer distance (> 620 miles/1,000 km) **if this "short test drive" is not sufficient for precise leak detection**.
Please discuss this with the customer.



Example of oil leaks on the engine

Definition: **"Oil sweating"**

Oil is visible; however, the amount of oil emerging is **not** significant and/or does not form drops of oil. There is **no** oil on the underbody protection, chassis components, front-axle carrier or on the ground.

So **no action is required** in this case.

"Drops of oil"

A significant amount of oil is visible; the emerging oil forms a trail with drops of oil. Oil is also visible on the underbody protection, chassis components, front-axle carrier and on the ground.

Carry out the following measures (1 to 4) in this case – as required.

Measure 1: 1 Oil leak at the side of the oil guide housing, near the long fastening screws ⇒*Possible oil leak* **-red arrows-**.

1.1 If an oil leak is found at the sides of the long fastening screws, near the starter ⇒*Possible oil leak* **-red arrows-** and ⇒*Possible oil leak* **-B-**, the oil guide housing must be replaced.

⇒*Workshop Manual '174619 Removing and installing oil guide housing'*

1.2 If the joint between the oil guide housing and cylinder block ⇒*Possible oil leak* **-red arrows-** and ⇒*Possible oil leak* **-B-** and the long fastening screws ⇒*Possible oil leak* **-red arrows-** are dry, there is no oil leak on the oil guide housing.

Possible oil leak

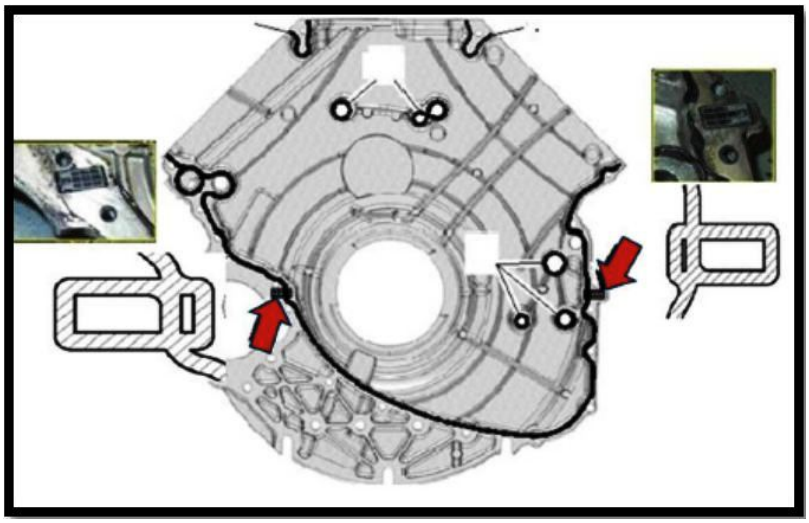
Measure 2: 2 Oil leak via the fastening screws for the lower chain housing cover

2.1 If an oil leak is **only** found on the lower chain housing cover ⇒*Oil leak on lower chain housing cover* **-A, C, D-**, the lower chain housing cover must be removed and re-sealed.

⇒*Workshop Manual '153319 Removing and installing lower chain housing cover'*

2.2 When applying new sealant, please remember that the sealant track is different close to the rubber sealing pads ⇒*Sealant track on lower chain housing cover* **-red arrows, hashed area-**.

Oil leak on lower chain housing cover



Sealant track on lower chain housing cover

Measure 3: 3 Oil leak via the thread of the fastening screws for the flywheel/drive plate in the crankshaft

3.1 If an oil leak is found in the flywheel/drive plate area ⇒*Oil leak on flywheel/drive plate* , the new fastening screws must be fitted as follows.

3.2 Thoroughly clean threaded bores in the crankshaft flange using workshop equipment.

3.3 Apply the screw locking agent 5 threads behind the existing fixed sealing compound in the marked area ⇒*Screw-locking agent* **-red rectangle-** all the way around the new fastening screws.

Information

A pneumatic or battery-operated screwdriver must not be used to screw in the fastening screws because these devices operate at too high a speed and as a result, the sealant cannot get into the thread.

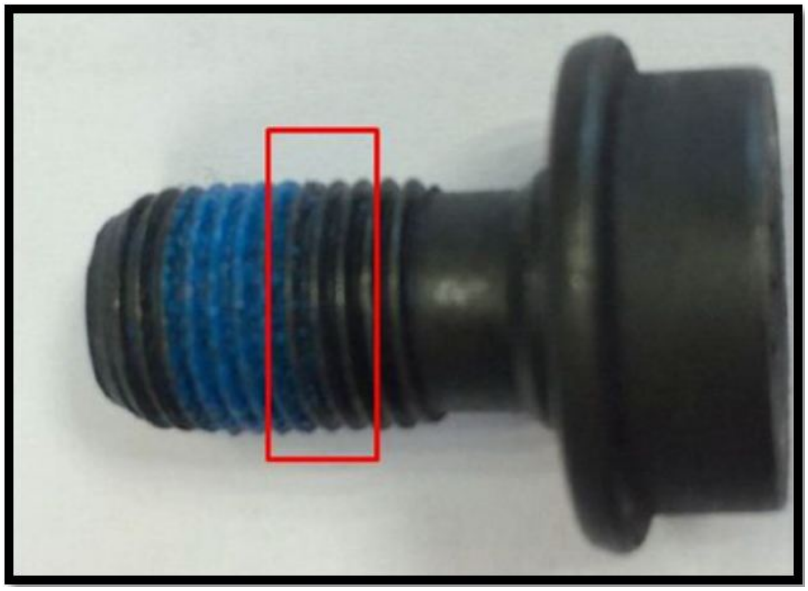
3.4 Screw in all fastening screw using a ratchet wrench and tighten hand-tight.

3.5 Remove emerging sealant immediately after screwing in the fastening screws.

3.6 Once all fastening screws have been tightened hand-tight, the fastening screws must be tightened immediately to the prescribed tightening torque.

⇒*Workshop Manual '136319 Removing and installing drive plate'*

Oil leak on flywheel/drive plate



Screw-locking agent

Measure 4: 4 Oil leak via the crankshaft/flywheel sealing ring

4.1 If an oil leak via the crankshaft/flywheel sealing ring is found, the sealing ring must be replaced.

⇒ *Workshop Manual '135955 Replacing crankshaft sealing ring (on transmission side)'*

4.2 The crankshaft/flywheel sealing ring must only be replaced if an oil leak via the sealing lips can clearly be detected.

4.3 The crankshaft/flywheel sealing ring is replaced as part of the procedure for re-sealing the lower chain housing cover.

Oil leak via the crankshaft/flywheel sealing ring

References: ⇒ *Workshop Manual '174619 Removing and installing oil guide housing'*

⇒ *Workshop Manual '153319 Removing and installing lower chain housing cover'*

⇒ *Workshop Manual '136319 Removing and installing drive plate'*

⇒ *Workshop Manual '135955 Replacing crankshaft sealing ring (on transmission side)'*

Spare parts

Parts Info:

958.107.071.22	⇒ Oil guide housing
000.043.300.39	⇒ Sealing compound
958.101.153.01	⇒ Shaft sealing ring

Invoicing for claim 1

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
17461957	Removing and installing oil guide housing	

For invoicing and documentation using PQIS, enter the following codes:

Location (FES5)	17460	Oil guide housing
Damage type (SA4)	5043	Oil leak

Invoicing for claim 2

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
15331959	Removing and installing chain housing cover	

For invoicing and documentation using PQIS, enter the following codes:

Location (FES5)	15330	Chain housing cover
Damage type (SA4)	5043	Oil leak

Invoicing for claim 3

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
13631955	Removing and installing drive plate	

For invoicing and documentation using PQIS, enter the following codes:

Location (FES5)	13631	Mounting for converter drive plate
Damage type (SA4)	5043	Oil leak

Invoicing for claim 3

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
13631950	Removing and installing drive plate	

For invoicing and documentation using PQIS, enter the following codes:

Location (FES5)	13631	Mounting for converter drive plate
Damage type (SA4)	5043	Oil leak

Invoicing for claim 4

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
13591955	Removing and installing crankshaft sealing ring	

For invoicing and documentation using PQIS, enter the following codes:

Location (FES5)	13590	Crankshaft sealing ring
Damage type (SA4)	5043	Oil leak

Invoicing for claim 4

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
13595550	Replacing crankshaft sealing ring	

For invoicing and documentation using PQIS, enter the following codes:

Location (FES5)	13590	Crankshaft sealing ring
Damage type (SA4)	5043	Oil leak