

# Technical Service Bulletin



## 10 Oil leak between engine and gearbox

10 16 13 2044546/1 June 14, 2016.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, A7, A8, Q5, Q7	2013 - 2016	All	TDI engine

## Condition

Evidence of oil loss, leaks, or drips on underbody (Figure 1). Evidence of oil loss may appear in any of the following areas:

- Side on upper oil sump in area of long bolts.
- Sealing flange securing bolts to upper oil sump.
- Thread in crankshaft to attachment of drive plate/flywheel.
- Oil seal of crankshaft (gearbox side) leaks.



*Figure 1. Underbody without undertray showing evidence of oil loss.*

## Technical Background

The evidence of oil loss is due to engine oil leaks between engine and gearbox.

## Production Solution

Not applicable.

## Service

### Note:

Perform all work according to the Elsa repair manual.

Before proceeding, confirm that the location of the oil loss can be precisely located. If the location cannot be determined, it may be necessary to clean the engine and perform a test drive, then check again.

## Area of oil loss:

- If oil loss marks are visible on the lateral long bolts and between the sealing surface of the upper oil sump to the cylinder block (Figure 2, B):
  - The upper oil sump must be sealed again.
- If oil loss marks are visible only on the sealing flange (Figure 2, A and C) (Figure 3, D):
  - The sealing flange must be sealed.
  - This leak is caused when oil leaks from the illustrated areas (Figure 2, A and C) (Figure 3, D) over the rubber seals (Figure 4). The oil seeps from position C, over the parting line to position A and D.
  - Note that there is an optimized sealant track in the area of the rubber seals (Figure 4, hatched area).

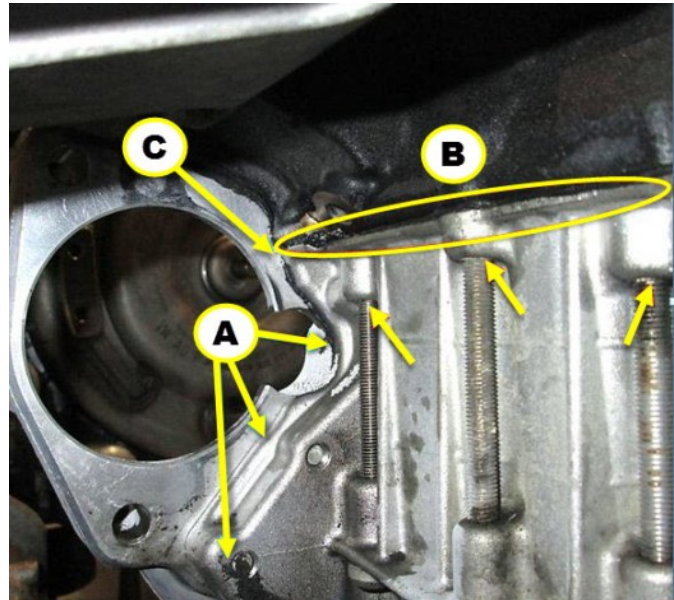


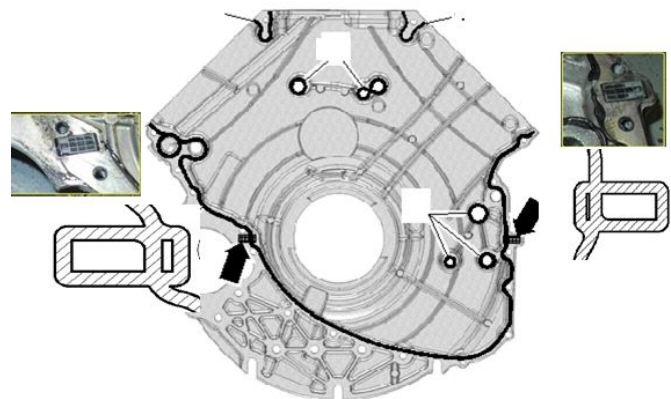
Figure 2. Location of oil marks.

- If oil loss marks are visible in the area of the securing bolts when the drive plate/flywheel is removed:
  - Install new securing bolts as shown (Figure 5). Note that replacing the oil seal will not fix this problem.
  - Clean the threads in the crankshaft flange so that they are completely free of grease. Loctite 7061 (which is commercially available) can be used to clean the threads.
  - Seal the new securing bolts for the drive plate/two-mass flywheel (Figure 6), on the crankshaft flange with Loctite 648 (part number D 154100A1, or commercially available). The area marked in red (Figure 6) must be cleaned and be completely free of grease. Apply the Loctite 648 completely around on approximately five thread turns behind the existing solid sealer on the new securing bolts for the drive plate/flywheel.

- For new generation bolts with microencapsulation (from December 2015), proceed according to the repair manual when removing/replacing this bolt. Observe the cleaning guidelines for the threaded hole in the crankshaft.
- The bolts must be tightened with a hand ratchet wrench, as the speed of a pneumatic impact wrench is too high and the sealant will not correctly cover the threads. Torque the bolts down to specification according to repair manual.
- If the oil loss marks clearly show that the oil passes over the sealing lips:
  - Replace the oil seal.



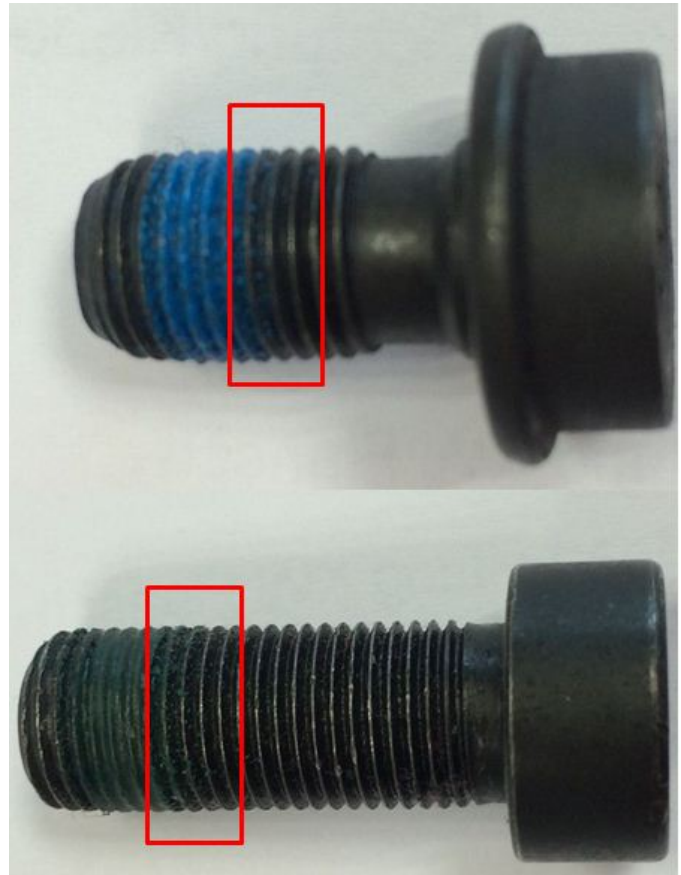
**Figure 3.** Location of oil marks.



**Figure 4.** Rubber seals (black outlines). New sealant track (hatched area).



**Figure 5.** Fix the new securing bolts as shown.



**Figure 6.** New securing bolts for the drive plate/two-mass flywheel (short bolt part number: N 90539801, long bolt part number: N 90929401 (M10x1x27))



**Figure 7.** New generation bolt (part number WHT007991 (M10x1x27))

## Warranty

TSB is for information only. Follow Elsa repair manual for specific repair instructions.

## Required Parts and Tools

Part Number	Part Description	Quantity
D 154100A1	Loctite 648	As needed
N 90539801	Short bolt	As needed
N 90929401	Long bolt	As needed
WHT007991	Bolt with polygon socket head	As needed

## Additional Information

All parts and service references provided in this TSB (2044546) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.