

Valve Cover Oil Leak at T Joint  
VN, VHD, VAH

## **FSB 211-003, Valve Cover Oil Leak at T Joint**

(October 2021)

Volvo Trucks has received reports from the field concerning engine oil leaks on D13 engines. These oil leaks are originating from the upper rear of the engine. Further investigation has determined some of these leaks are caused by incorrect methods used when resealing the lower valve cover frame.

With the introduction of the integrated timing plate seal and the one-piece upper timing cover seal, the sealing procedure for the lower valve cover frame have changed. Testing has confirmed that if too much sealant is applied it can weaken the gasket and cause an oil leak over time. The images below outline the gasket pattern changes. The below procedures **MUST** be followed.

## Procedure

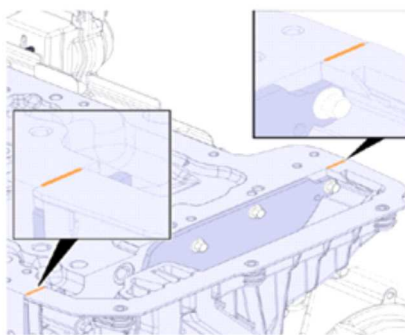
- The lower valve cover frame gasket is NOT to be reused. Always replace the gasket anytime the lower valve cover frame is disturbed (i.e. removed).
- Before applying sealant **BE SURE** the surface is **completely** free of grease, oil, and old sealant. Any oily or greasy residue will prevent the sealant from properly adhering. The use of a cleaning agent/solvent will be required (i.e. Brake-Clean or equivalent).
- When applying the sealant follow the procedure in IMPACT. Use 2 beads of sealant per side at a thickness **no larger than 2mm (.078 in)**. See image below. In this joint, too much sealant causes issues.
- Install the lower frame with new gasket, upper valve cover, and torque to specification within 20 minutes of sealant application.

Always refer to IMPACT with your specific chassis ID for correct procedure.

**New Seal Pattern**



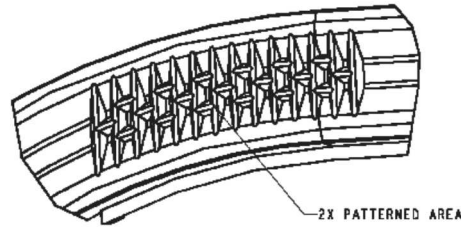
T2176113



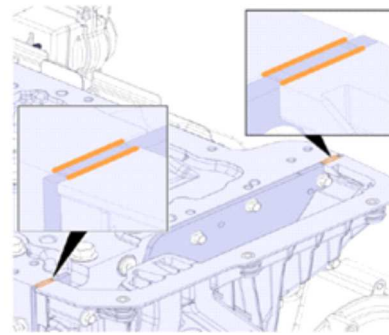
T2176115

**13L Wet Seal Timing Gear Plate**

**Old Seal Pattern**



T2176114



T2176116

**13L Integrated Seal Timing Gear Plate**

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