

 Preview Solution CBR-2474-1

AMT - G Counter Shaft Brake (CSB) Oil Intrusion - Models VN (4), PR (4)

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Valid For

Mack Chassis - PR (4)

Volvo Chassis - VN (4)

Model Year - 2025

1. Overview

This bulletin provides guidance for identifying and addressing oil intrusion related to the **Countershaft Brake (CSB)** in **AMT-G** transmissions. It outlines indicators of true oil intrusion, common misdiagnoses, and recommended corrective actions.

2. Symptoms of Oil Intrusion

Oil leakage may be observed from the bottom of the flywheel or clutch housing. The following symptoms indicate potential oil intrusion:

- Presence of oil inside the clutch housing (typically not black like engine oil)
- CSB housing visibly wet with oil
- Oil residue on or near the bottom of the **Concentric Clutch Actuator (CCA)** vent area
- Oil observed inside the **Clutch Valve Unit (CVU)** air passages and vent
- Hardened CSB seals with embedded clutch material (as seen in previous AMT-F cases)
- Surface damage or contamination on the CSB cover





3. Inspection Procedure

- **Remove the Clutch Valve Unit (CVU)** and inspect the internal air passages and vent for oil.
- **Inspect the Countershaft Brake (CSB)** housing for visible oil and residue.
- **Examine the Concentric Clutch Actuator (CCA)** vent area for external oil contamination.
- **Check CSB seals** for hardening or signs of clutch material embedding.
- **Assess the CSB cover** for damage caused by debris.





4. Required Repairs

If oil intrusion is confirmed:

- Replace the **Clutch Valve Unit (CVU)**
- Replace the **Concentric Clutch Actuator (CCA)**
- Replace the **Countershaft Brake (CSB) cover** if surface damage is present

5. Common Misdiagnosis

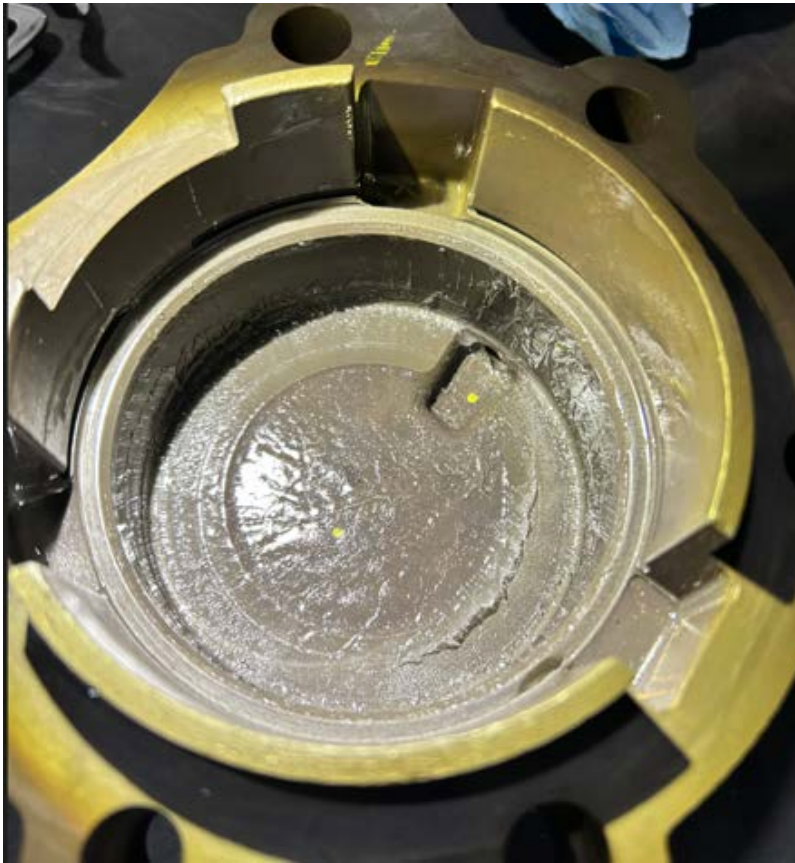
Some new AMT-G units may be misdiagnosed due to:

- Shiny or oily appearance inside the CVU or CCA air passages
- Excessive lubricant applied to air tubes or internal parts, giving the false appearance of a leak

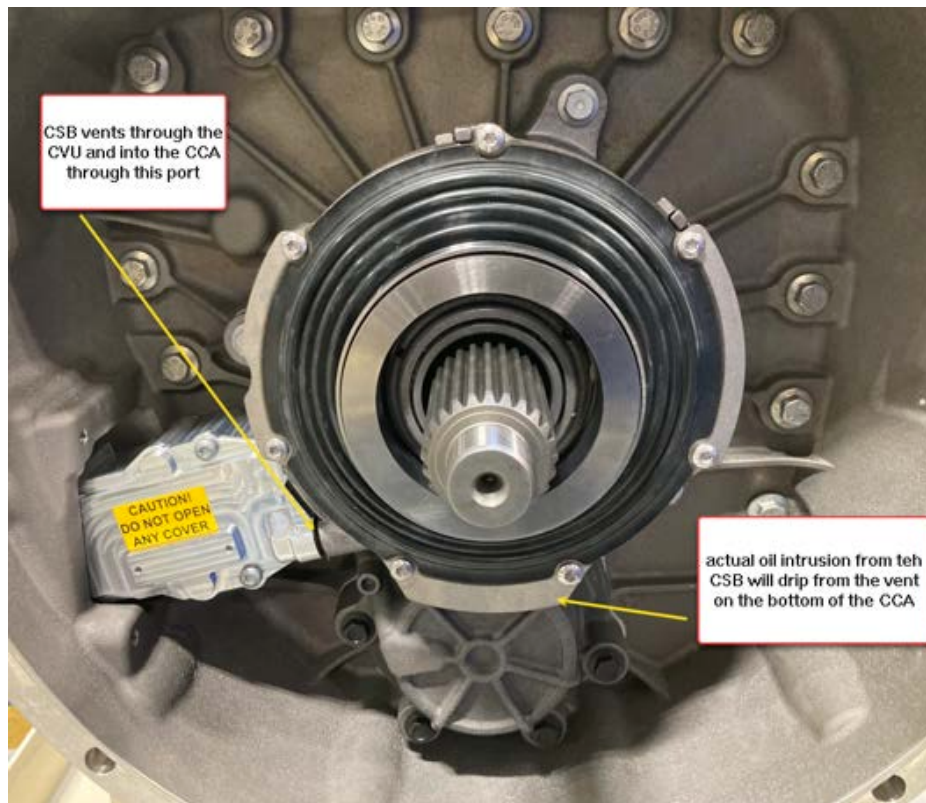
These conditions can lead to incorrect replacement of non-faulty components.













6. Corrective Action When NOT Oil Intrusion

If inspection shows no actual intrusion and parts appear over-lubricated:

- **Clean all affected components thoroughly**
- **Reassemble using a light, even coating of lubricant**
- **Investigate alternative sources** for the apparent leak

7. Notes

- Accurate diagnosis is critical to avoid unnecessary part replacement and to ensure long-term repair effectiveness.
- **It is important to note that very low mileage or brand-new vehicles are unlikely to have true oil intrusion.** In these cases, excess assembly lubricant is a more likely cause and should be carefully evaluated before proceeding with component replacement.

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