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Apparent leakage in MAN radiators

In MAN radiators, if too much coolant is poured into the expansion tank, it escapes as the engine temperature rises and flows downward via the drains. The coolant escaping between the radiator and the expansion tank is then sometimes mistaken for a leak.

This applies to radiators for MAN models TGA, TGS, TGX, and F2000 with the following part numbers:

- CR 701 000P ■ CR 1038 000P ■ CR 1167 000P
- CR 702 000P ■ CR 1039 000P ■ CR 1168 000P
- CR 770 000P ■ CR 1040 000P ■ CR 2336 000P

In the abovementioned radiators, the cooler and expansion tank form a single unit. If the expansion tank is overfilled, excess coolant escapes via the pressure compensation valve of the blue cap as the engine temperature or system pressure rises. Coolant that has escaped at the top or has run next to the fill port during filling flows downward via drainage channels and escapes again between the cooler and the expansion tank—which can then be incorrectly interpreted as a leak.



Figure 1: MAN radiator with compensating tank

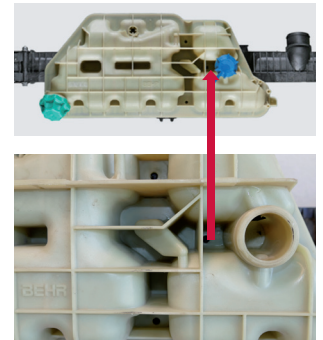


Figure 2: Compensating tank with beads and drain openings



Figure 3: Excess coolant escaping again around the joint face on the expansion tank

IMPORTANT!

When filling the cooling system, it is important to proceed carefully and ensure the correct quantity of coolant is used. Coolant is also subject to wear and tear and should therefore be replaced regularly according to the manufacturer's specifications to prevent corrosion, lime, cavitation, and deposits in the cooling system. Careful venting of the cooling system prevents malfunctions due to entrapped air.