

Plastic Opaque Surge Tank Staining

Plastic opaque surge tank staining

Field Service Product One Page Update

10/1/2025

Problem Details:

- Some units may experience an issue with a discolored coolant surge tank complaint. Units may also come in with a perception complaint of oil or combustion gas in the coolant based on the visible condition of the surge tank. The surge tank can be stained internally, making it difficult to determine the coolant level.

Affected Models / Truck options/ Truck Population:

- Freightliner Cascadia & Western Star models.

Responsible Supplier:

Mann hummel

SYMPTOM

Through testing and analysis, deposits are consistent oxidized aluminum debris, corrosion products, and environmental dirt. The large presence of oxidized aluminum makes the deposit appear black. Ethylene glycol acts as a chelating agent, influencing the transfer of corrosion products depositing them in the surge tank. The surge tank can be stained internally, making it difficult to determine the coolant level.

CAUSE

The coolant filter was removed from the oil coolant module in early 2015 (review 15TS-10Rev). With the removal of this filter, any cooling system dropout may accumulate in the coolant surge tank. This allows sediment to build up in various areas of the tank and can lead to a film on the inside of the tank walls. This dropout can range from a very small number of sediment/debris up to the inability to see the coolant level through the outside of the surge tank.

Long Term Field Plan:

For guidelines on required action and repair procedure follow 24CSA-20 field letter communication that was released October 2024.



Examples of discolored surge tanks