



C7 & C9 HEUI Pumps - Common Failures TSB53018-C

Common Failures for Caterpillar (CAT) C7 & C9 Engines

If you ever experience repeated, low-hour failures of your HEUI pumps (fuel pumps), there might be debris circulating within your fuel system. Accompanying fuel injector failures are also symptomatic of fuel contamination. Below are recommended areas to inspect for diagnosing your failure.

- ▶ Oil Filter Base Gasket – This gasket may break away or receive damage, which can cause unfiltered oil to bypass the filter by transferring unfiltered oil into the filtered oil chamber.
- ▶ Oil Cooler Flange – The oil cooler may be warped and not perfectly straight. Check this using a straight-edge and feeler gauge.
- ▶ Oil Cooler Gaskets – Be sure to check that the gasket properly adheres to the oil cooler flange, especially between filtered and unfiltered oil cavities.
- ▶ Oil Filter Base (Bypass Check Valve) – Check the bypass valve seat for porosity. If present, you will need to replace the Filter Base, Spring, Valve, and Oil Cooler Gasket.
- ▶ Check Valve Spring – Ensure that the oil filter check valve utilizes the most current spring design.
- ▶ Bypass Valve – Inspect the oil filter's bypass valve to be sure that there are no leak paths evident on the seating area.