Catalyst Failure Can Cause an Engine Failure - All Models and Model Years

Engine failure can occur within a few months after a catalyst failure.

Catalyst material (ceramic and precious metal) can be ingested through the EGR (if equipped) due to the Intake/Exhaust valve overlap. Once catalyst material enters the cylinders, it becomes abrasive and can result in scored cylinder bores. Also, the engine oil can become contaminated with metallic material with additional micro fine wear occurring throughout the engine. The engine will lose compression, oil pressure, set P-codes and begin making internal noises.

Example:

A vehicle with 59,000 miles has an original equipment engine replaced under a New Vehicle Warranty. A technician found there was high leak down, misfiring, setting P-codes and scored bores. This condition is most likely caused from a catalyst failure. A short time later at 59,600 miles, the catalysts were replaced under New Vehicle Warranty. A short time after that at 61,000 miles, the replacement Mopar service engine fails and is replaced a second time by the Vehicle/Part Warranty. The engine failure mode is the same as the OE engine failure due to the failed catalysts.

Recommendations:

Catalysts must be inspected during an engine replacement.

If a Mopar service engine fails due to catalyst ingestion and the catalyst warranty has expired, the Mopar service engine will not be covered under warranty due to, as has been documented in a prior Warranty Newsletter article, "if a non-covered component fails and causes a covered component to fail, the covered component is not covered."

If a Mopar service engine fails due to catalyst ingestion and the catalyst warranty has not expired, use the Engine Long Block replacement LOP as the causal LOP for the engine, with failure code 41 – Foreign material, and the Catalyst LOP for N/C in the same condition.

Include the Catalyst part with the engine parts in the claim and mark the Catalyst as the failed part.

If a catalyst fails and the engine seems fine, Mopar recommends replacing the engine at that time following the instruction above. This will avoid a customer visit with a failed engine in the future and assure the vehicle is actually Fixed on the First Visit. This recommendation also includes any customer pay Cat failures.

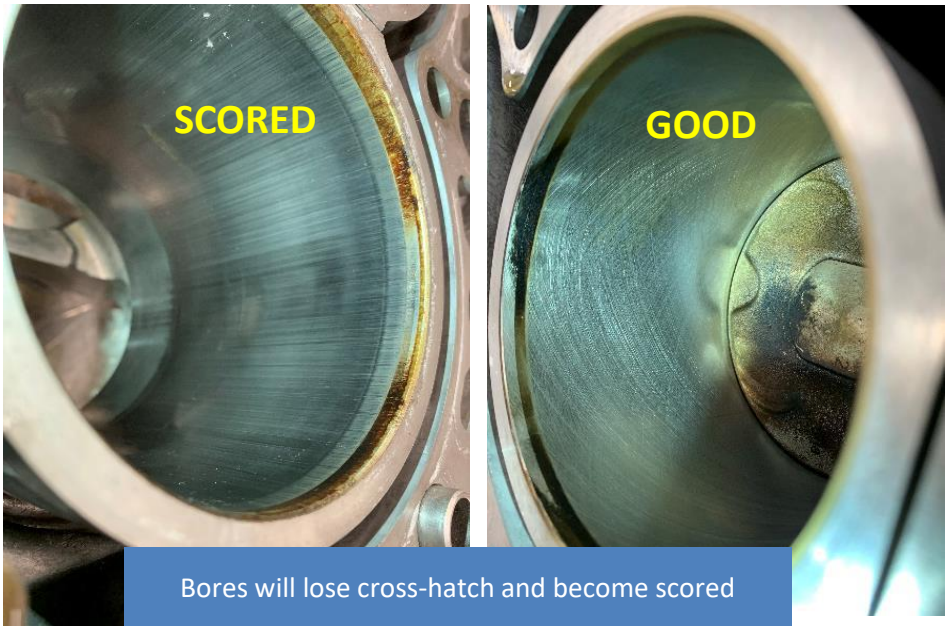
If a damaged catalyst is not replaced during a Mopar engine replacement and the engine fails at a later date, the Mopar service engine will be reviewed. If it is determined that it was due to a Catalyst failure, the engine repair may be charged back.

Piston skirts become scored from catalyst debris.



Eroded and broken Catalyst





Bores will lose cross-hatch and become scored