

FAQ: COOLERS HAVE TEETH?

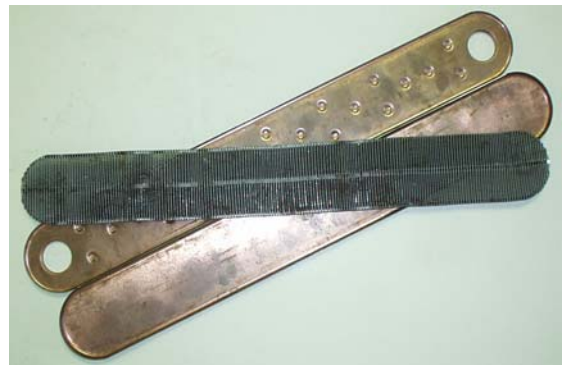
THE FACTS ABOUT EXPANSION & CONTRACTION OF OIL COOLER INTERNALS

HECAT has questioned many engineering contacts at many OEM's regarding the claim by heated flusher manufacturers, that you must use heat to clean transmission oil coolers because the materials expand under heat and trap contamination that can only be released and removed by using a heated flushing process.

To our surprise we found that this was indeed a true phenomenon that occurred many years ago when the internals of transmission oil cooler were made primarily of brass materials. ► Somewhere around the late 60's or early 70's, OEM's became aware of this issue and immediately began R&D on different materials to address and resolve this problem.

Since sometime in the early 70's, transmission oil coolers have been constructed of stainless steel and other alloys that resist the expansion and contraction issue to well over 500 degrees. The inside of the stainless steel plates are coated with copper to better induce the thermal transfer required for the cooler to properly perform. The wire mesh is constructed of a thermally stable stainless steel alloy. Thanks to AC Delco for supplying this unassembled component for display. ►

Note: You can see from the picture that the coolers internal mesh will act like a filter screen, trapping larger debris at the inlet and restricting sufficient cooler flow. This debris cannot be pushed through and this is why HECAT always recommends the cooler must be back flushed first.



- FACT: Transmission oil coolers do not have teeth.
- FACT: Materials common to the construction of today's transmission oil coolers do not expand and contract, even under the most severe transmission oil temperatures.
- FACT: Since the FTC was deregulated, there is no true watchdog over deceptive marketing and this "cooler has teeth" issue is just another case of twisting the facts and marketing to the masses by playing on their fears.
- Proverbs 14:15 "A simple man believes anything, but a prudent man gives thought to his steps"



Tel: 800-380-9501

Web: www.hecatinc.com