

NHTSA Campaign # 18V-642 – Supplemental Chronology Information

Heil uses brackets to fasten hydraulic oil tanks to certain models of its garbage truck bodies. For each hydraulic oil tank, there are two brackets mounted to the chassis frame rail. For many years, Heil used a 2 x 2 x 1/4" L-shaped angle bracket to secure the tanks to the chassis frame rail. Beginning in 2014, Heil began to observe variations in the construction and placement of chassis components of among the different chassis makes and models used by Heil. These variations led Heil to offset and move the tank from its usual mounting position. When the tank was moved, the new positioning would not accommodate the L-shaped bracket that Heil typically used and, accordingly, Heil designed a new bracket to secure the tanks. The new bracket was a 1/4" inch steel formed channel bracket and was put into production in June 2014.

The bracket was initially produced by Heil, but in April 2016, production was outsourced to a supplier. After the formed channel bracket was introduced into production, Heil received a limited number of reports of cracks of varying degrees forming on brackets in the field. Reports of metal cracking are not unusual given the extreme conditions in which garbage trucks are used, but Heil's field service group began to monitor the issue and ultimately initiated a technical investigation to understand the cause and consequences of the cracking. The investigation found inconsistencies in the manufacturing process for the bracket and Heil began to consider the development of a revised bracket. Heil had not received any reports as of this time suggesting the possibility of injuries or property damage relating to the cracks in the brackets. The lack of incidents is consistent with the practice requiring drivers to inspect their garbage trucks prior to each run and during regular preventative maintenance inspections.

The cracks in the brackets, while microscopic initially, if allowed to progress will become clearly visible as a line starting at the upper end of the bracket and moving downwards through the metal. The brackets are located on the truck such that operators should be able to identify a crack upon visual inspection and can take appropriate action long before the potential exists for the crack to propagate to the point where the bracket might break. Consistent with the inspection process, Heil received a small number of reports related to varying degrees of cracking (or suspected cracking) in the brackets - approximately 6 reports from different users relating to garbage trucks that had been placed in service over various periods of time. The reports also suggested that the timeline for the crack to develop and propagate varied depending on the truck's duty cycle, operational conditions and speeds. After receiving the reports, Heil introduced a replacement bracket in October 2016, and is not aware of any issues related to the performance of the revised bracket.

Subsequently, Heil learned of an incident which occurred in May 2018, in which both of the brackets on a Heil Half-Pack garbage truck failed on a highway in Louisiana. Allegedly, when the brackets broke, the tank dislodged from the chassis frame rail, spilling the hydraulic oil inside onto the roadway. Several oncoming vehicles encountering the spilled oil were involved in collisions resulting in some injuries to the vehicle occupants. Heil was notified of the incident by the equipment owner well after it occurred. In July 2018, Heil inspected the involved vehicle which showed that the end user had attempted to repair the brackets by welding them instead of replacing them. Heil is not aware of any previous reports related to the brackets on the particular vehicle involved in the incident. After investigating further and consulting with counsel, Heil decided to conduct a safety recall.