
NHTSA Warns of Defective Cargo Trailers

Article provided by Schaefer Engineering

Imagine a tractor towing two trailers descending I-70 from the Eisenhower tunnel headed toward Georgetown. The driver, having stopped at the tunnel, knows that his brakes are properly adjusted and cool, and that the trailers are securely attached to the tractor and each other. Confident in his equipment, the driver descends the hill as he has numerous times before. What the driver doesn't know is that the lead trailer has an invisible crack around the kingpin support – and that crack is growing.

At the last corner before entering Georgetown, the lead trailer suddenly separates from the tractor. The air lines to both trailers pull out of the fittings, and the spring brakes on the trailers engage when the air pressure drops. As the nose of the lead trailer slides off of the tractor, the landing gear digs into the surface of I-70. The trailers skew sideways and begin to roll over and over, mowing down the highway right-of-way fence, tearing open, and spewing the contents over the surface of the highway. The trailers finally come to a stop, blocking the Eastbound lanes of I-70 for several hours. Luckily, nobody is injured or killed, but the trailers contents are a total loss. The bill to the insurance company? Nearly a million dollars – and it could have been far worse.

Does this sound far-fetched? Based on recent information published by the National Highway Traffic Safety Administration (NHTSA), this scenario could happen, without warning, on any of approximately 4,000 trailers manufactured by Monon Corporation in 1991 and 1992. Here's the story:

Monon Corporation manufactured approximately four thousand 28-foot long cargo trailers in 1991 and 1992. On some of those trailers, the king pin assembly, which couples the trailer to a tractor, can develop cracks due to a missing weld.

A photograph [not available] of the interior of a Monon trailer shows a square portion of the steel plate floorboard has been cut away to show the floor support members, and the cross-block, which supports the king pin. The problem is that several welds which should have been made on the vertical leg of the cross block were never made. Because of the missing weld, cracks can start in the other welds holding the cross-block to the floor supports.

The cracks aren't visible in a normal inspection, because they are located underneath the trailer's floor. Finding the cracks in the early stages would require cutting through the steel floor of the trailer to expose the cross-block and floor supports. Cracks which grow unchecked can eventually extend through the coupler plate on the underside of the trailer. However, finding those cracks would require cleaning the grease off of the trailer's coupler plate, which isn't commonly done. If the cracks were allowed to grow unchecked, they could eventually cause the king pin assembly to separate from the trailer. Worse yet, because the manufacturer doesn't exist any more, there isn't an effort under way to recall these trailers.

In 1997, Monon Corporation declared bankruptcy. Its assets were purchased by Monon HPA, of Monon, Indiana, and liquidated. Monon Corporation's original sales records were either lost or destroyed, so there isn't an easy way to locate and notify owners of these trailers about the potential cracking. Because the manufacturer doesn't exist any more, there is no manufacturer-funded recall effort, as would be expected for a passenger car. NHTSA has begun to notify large fleets of the problem, and has located approximately 40% of the affected trailers.

According to the NHTSA report, as many as 2,400 trailers with this potential defect could still be on the road. And since the manufacturer doesn't exist any more, fleet owners could be left holding the bag if one of these trailers has a catastrophic failure. ❖

— Schaefer Engineering would like to thank Tom Bowman of the National Highway Traffic Safety Administration for his generous assistance in preparing this article.