DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

Notice of Safety Advisory on RoadRailer Trailers

Agency: Federal Railroad Administration (FRA), DOT.

Action: Notice of Safety Advisory.

SUMMARY: FRA is issuing Safety Advisory 99-03 addressing the securement of floor beam cross-members on RoadRailer® trailers in order to prevent the highway tandem wheels on these trailers from falling onto the rails on moving trains.

FOR FURTHER INFORMATION CONTACT: Gary Fairbanks, Mechanical Engineer, Motive Power and Equipment Division, Office of Safety Assurance and Compliance, FRA, 400 Seventh Street, SW, RRS-14, Mail Stop 25, Washington, D.C. 20590 (Telephone 202-493-6322/ Fax 202-493-6230)

SUPPLEMENTARY INFORMATION:

Over the past several months, FRA has discovered that several RoadRailer® trailers operated by Triple Crown Services (Triple Crown) have experienced failures of floor beam cross-members. These cross beams connect the highway tandem wheel set to the body of the trailer via slide rails. The failure of the cross beam allows the weight of the tandem wheel set to deflect the slide rails to the point where the highway tires contact the rail. The reported failures, which to date have been isolated, were discovered while

the trailer was in train formation, triggered a dragging equipment detector on a moving train, or was noticed by the crew of a passing train. At this time, there have been no reported instances of tandem wheel sets separating from the trailer, which may cause a derailment or undesired train stop. The trailers involved have been set out of their trains under controlled conditions without injury or loss of property.

FRA notified Wabash National Inc. (Wabash), the manufacturer of RoadRailer® equipment, and requested that Wabash randomly inspect trailers at the Fort Wayne, Indiana, Triple Crown facility. The first inspection was conducted on October 12, 1999, and revealed a high percentage of four-to-six-year-old trailers with one or more cross-member defects. The cross-member defects found during the inspection could be classified into four categories:

- 1. A weld crack at the slide rail to I-beam cross-member;
- 2. A crack in the cross-member I-beam flange (which usually starts at the end of a weld);
- 3. A crack which has progressed into the web of the I-beam from the flange; or
- 4. A cross-member broken into two pieces.

A second inspection was conducted at the Fort Wayne, Indiana, facility on October 14, 1999, by representatives of Wabash, Triple Crown, and FRA. A third inspection of the facility was conducted on October 27, 1999, and included representative of the Federal Highway Administration (FHWA). The results of these two inspections were consistent with the observations made in the earlier inspection.

The practice of attaching the tandem wheel set slide rails to the trailer body by welding to floor cross-member I-beam flanges has been the accepted method of highway trailer fabrication for many years. This method is currently being used by nearly all van trailer manufacturers, and is considered safe and reliable when properly applied. It should be noted that there are some RoadRailer® trailers which have been in service since January 1988 that have not exhibited signs of weld or cross-member cracking in the above noted areas. Currently, the entire fleet of Triple Crown RoadRailer® trailers are in the process of being inspected or repaired. All inbound and outbound trailers are being inspected and depending upon the condition of the trailer, it may be withheld from service, transloaded, or repaired prior to being assembled into a train. At this time, the manufacturer is considering one broken floor beam cross-member or four successive cross-members with cracks to be sufficient cause to withhold the trailer from service or repair the trailer prior to continuing it in service.

Recommended Action:

Until the root cause of the floor beam cross-member failures can be determined, and the appropriate long-term repairs effectuated, FRA recommends that the following action be taken with regard to all RoadRailer® trailers:

- Each trailer should be inspected upon receipt at a facility from a highway motor carrier prior to being transferred to the rail mode to determine whether it has any of the following conditions:
 - 1. One broken floor beam cross-member.
 - 2. Four successive cross-member with cracks.

If either of the conditions are found, the trailer should be held until a repair can be made to correct the deficiency, or if loaded, the lading should be transferred to another trailer that has been inspected and found not to have any of these conditions.

Each such inbound trailer should be inspected upon its arrival in a train prior to its transfer to the highway mode. If either of the conditions noted above are found, the trailer should be held until a repair can be made to correct the deficiency, or if loaded, the lading should be transferred to another trailer that has been inspected and found not to have any of these conditions.

FRA may modify Safety Advisory 99-03, issue additional safety advisories, or take other appropriate action to ensure the highest level of safety on the Nation's railroads.

Issued in Washington, D.C. on NOV evy Delle

George Gavalla

Associate Administrator

for Safety

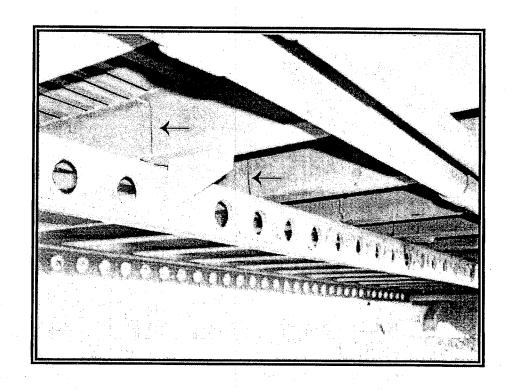


Figure 1 - Broken Floor Beam Cross-members

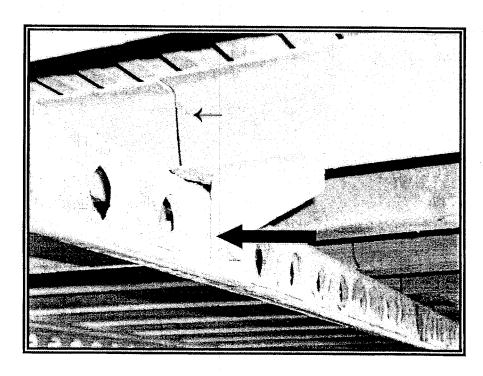


Figure 2 Broken Gusset Plate and Floor Beam Cross-members