



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 08-055
Date Opened: 09/17/2008
Principal Investigator: Tom Bowman
Subject: Front Leaf Spring Fractures

Manufacturer: IC Corporation, Navistar, Inc
Products: 2007 MY International Truck 4300 & CE School Bus
Population: 800 (Estimated)

Problem Description: Front leaf springs were manufactured with a crack that can propagate and cause the spring to fracture.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	18	18
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
# Injuries:	0	0	0
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	0	0

*Description of Other:

Action: Open a Preliminary Evaluation (PE).

Engineer: Thomas Bowman
Div. Chief: Richard Boyd MB
Office Dir.: Kathleen C. DeMeter

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Summary: In June 2007 International Truck submitted a field report under the tread act Early Warning Reporting ("EWR") requirements, that identified an incident in which the front leaf spring installed in a Model Year 2007 "CE" school bus chassis had fractured after approximately 6,000 miles of service.

At ODI's request, International Truck Reviewed the warranty claim history for the front leaf springs and identified an additional 17 reports of related (part number #3533197-C91) fractured front leaf springs.

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International Truck notified their supplier (Hendrickson MFG. Co.) who performed a metallurgical examination of several fractured springs and determined (1) all of the fractured springs had been manufactured in one specific "job lot" consisting of 1600 springs manufactured in late July and early August 2007 and (2) an indeterminate number of springs in this lot had been manufactured with a crack due to improper heat treatment (quench crack). This quench crack provided the initiation point for subsequent crack propagation and fracture. (A copy of the Hendrickson report is filed in the repository for this investigation.)

Hendrickson and International have advised ODI that a broken front spring will not significantly compromise vehicle control and that the nature of the failure indicates that few, if any, additional springs are likely to fracture in service. Further a broken spring is likely to be detected promptly since the broken portion is visually evident when it "hangs" from the vehicle after fracture.

ODI is opening this investigation to further examine this issue and analyze the consequences on the school buses on which these springs were installed.