



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA 09-003
Prompted by: FMCSA Reports
Date Opened: 01/15/2009
Investigator: Bruce York-B
Approver: Richard Boyd
Subject: Drag Link Failure

Date Closed: 07/06/2010
Reviewer: Richard Boyd

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: VOLVO TRUCKS NORTH AMERICA
Products: Model Year 1998 - 2005 Volvo VN and VNL Trucks
Population: 111,034

Problem Description: Drag-Link failure resulting in a loss of steering control.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	17	24	41
Crashes/Fires:	13	10	23
Injury Incidents:	0	2	2
Number of Injuries:	0	2	2
Fatality Incidents:	0	0	0
Other*:	0	927	927

*Description of Other: Drag Link replacement warranty claims.

ACTION / SUMMARY INFORMATION

Action: This Engineering Analysis has been closed. Recall 10V-282

Summary:

EA09-003 is closed with the submission of Volvo's recall 10V-282 recalling approximately 111,034 Model Year (MY) 1998 through 2005 VN and VNL class 8 trucks. Volvo announced recall 10V-282 in response to NHTSA's recall request letter dated June 3, 2010 (available at NHTSA's web site www.safercar.gov). NHTSA found that these vehicles were designed and manufactured with a TRW ball joint that does not meet the combined performance requirements and foreseeable inspection practices of the U.S. market. The ball joint in the steering system that connects the driver's side steering arm/knuckle to the drag link can fail resulting in a total loss of steering on the vehicle. Volvo changed the size and supplier of the ball joint used on these vehicles starting with the 2006 MY vehicles. The failure rates on the vehicles manufactured with the larger ball joint are significantly less than the subject vehicles.

The closing of this investigation does not constitute a finding by ODI that no safety defect exists in the vehicles that are not included in Volvo's recall. ODI will continue to monitor the incidence of drag link failures in other MY Volvo trucks.

Note: The recall request letter dated June 3, 2010 associated with this investigation describes 49 incidents of ball joint separation. After a comprehensive review of the data it was discovered that the number of separations that NHTSA was aware of was 41 with a failure rate of 36.9 R/100K. The 41 separations resulted in 23 crash allegations.