



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 14-020

Date Opened: 07/07/2014

Investigator: Kyle Bowker

Approver: Otto Matheke

Subject: CNG Fuel System Integrity

Date Closed: 02/05/2016

Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Daimler Trucks North America LLC

Products: 2014 Freightliner Business Class M2

Population: Confidential

Problem Description: During a braking maneuver, an unsecured forklift rolled forward, penetrated the front wall of the cargo compartment and struck an unprotected compressed natural gas (CNG) fuel container mounted behind the truck cab, causing it to burst with explosive force.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	1	1
Crashes/Fires:	0	0	0
Injury Incidents:	1	1	1
Number of Injuries:	1	1	1
Fatality Incidents:	1	1	1
Number of Fatalities:	1	1	1
Other*:	1	1	1

***Description of Other:** The subject incident was widely reported by numerous news media outlets.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA16-001).

Summary:

On April 3, 2014 in Howard, Wisconsin, a model year 2014 Freightliner Business Class M2 truck manufactured by Daimler Trucks North America LLC (DNTA) experienced a catastrophic CNG fuel container burst when it was struck by an unsecured forklift being transported inside the truck's cargo compartment. A contractor working for the National Center for Statistics and Analysis (NCSA) Special Crash Investigations (SCI) Program conducted a field examination of the incident vehicle and the incident scene (SCI Case Number: IN14016). The Office of Defects Investigation (ODI) subsequently sent an information request letter to DTNA and received two responses dated January 23, 2015 and June 24, 2015, respectively.

ODI continues to evaluate the CNG fuel system integrity on the subject vehicles and other medium- & heavy-duty CNG vehicles. ODI also continues to investigate CNG fuel system integrity related incidents as they arise. ODI has engaged industry on this subject at various meetings, seminars and conferences, and through involvement in committees hosted by industry and standards development organizations including the Natural Gas Vehicles for America (NGVAmerica) national trade association and the American National Standards Institute (ANSI)/ CSA Group.

This Preliminary Evaluation has been upgraded to an Engineering Analysis (EA16-001) so that ODI may gather additional information about CNG fuel system integrity from additional vehicle manufacturers, fuel system integrators and component suppliers and continue to engage with stakeholders to better understand the industry state of the art and the hazard potential.