



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: EA 16-001
Prompted by: Field Incident, PE14-020
Date Opened: 02/03/2016
Investigator: Kyle Bowker
Approver: Otto Matheke
Subject: CNG Fuel System Integrity
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 a 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.

****** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Engineering Analysis has been opened.

Summary:

On April 3, 2014 in Howard, Wisconsin, a model year 2014 Freightliner Business Class M2 truck manufactured by Daimler Trucks North America LLC (DTNA) 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 (NGV America) national trade association and the American National Standards Institute (ANSI)/ CSA Group.

An Engineering Analysis has been opened 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.