

Albemarle County Public Schools

Bus Fire

January 13, 2017

Overview

- ▶ On January 13, 2017 a D-type bus was transporting the Monticello High School swim team (23 students and 3 coaches) to Bridgewater College for a swim meet when the bus caught on fire
- ▶ All passengers and the driver evacuated safely on I-64
- ▶ No injuries were reported
- ▶ The bus was a total loss









Background

- ▶ Nationally, about one school bus fire per day (379/year)
- ▶ Very few injuries on bus, more likely on secondary vehicles
- ▶ Bus was a 2005 model year D-type bus
- ▶ 131,347 miles
- ▶ Mercedes engine recall in 2009 for fuel line leaks
- ▶ Recall work not done at our shop nor at vendor's shop
- ▶ Average about one fuel leak in 220-bus fleet per month
- ▶ Repaired fuel leak on bus 5 months prior to incident
- ▶ PM performed on bus nine days before incident

Event

- ▶ Same driver drove bus on a field trip from 8:20 AM to 12:20 PM
- ▶ Data indicates a complete pre-trip inspection was done
- ▶ Returned at 3:00 PM, did abbreviated pre-trip inspection (including checking engine), found burned-out bulb, had bulb replaced at shop, started trip
- ▶ Travelled west on a gradual upgrade
- ▶ ECM limited speed to 60 MPH four times
- ▶ Students observed flames/smoke out rear window, alerted driver

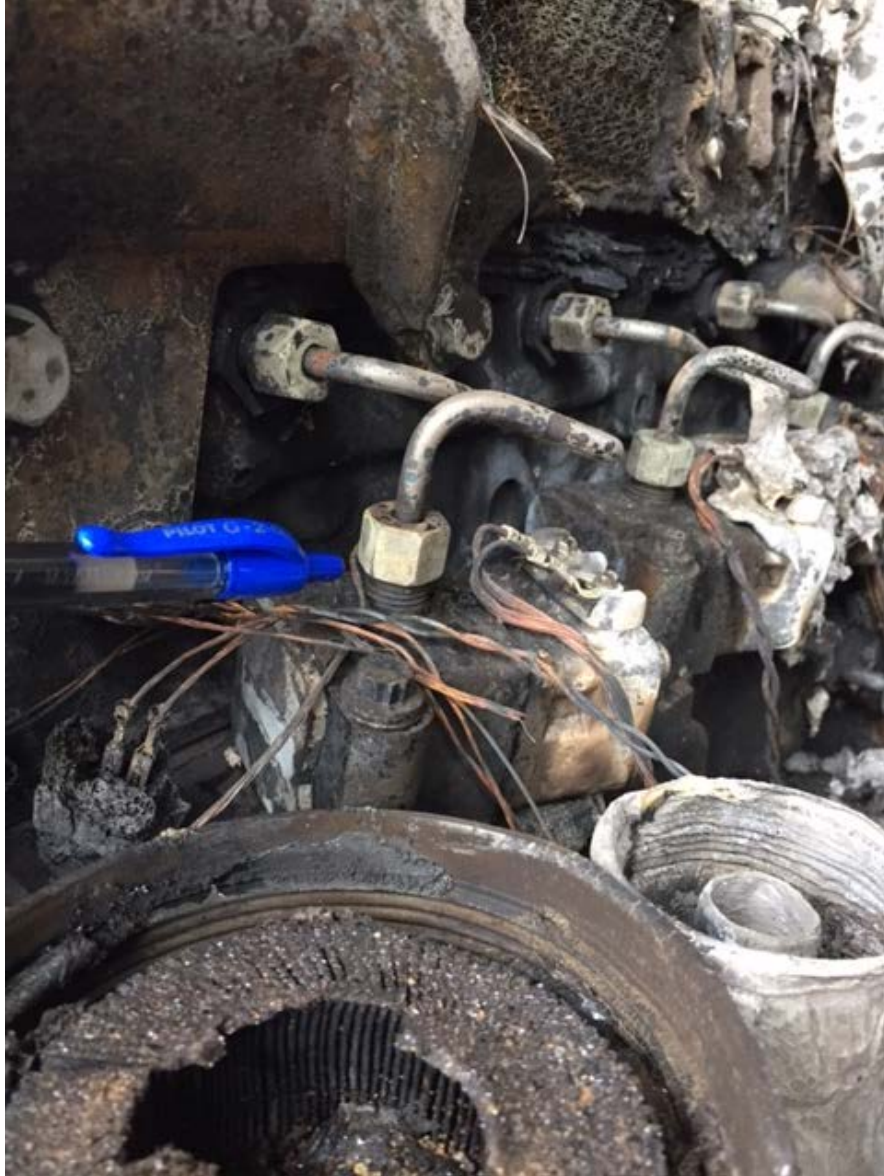
Investigation

- ▶ County Fire Marshalls arrived the next morning and determined that the cause was a diesel leak due to a loose hex nut
- ▶ Insurance company and OEM each contracted forensic accident investigation engineering companies
- ▶ Each determined separately that the fire started at the door-side rear outside tire

Before



After





Door Side Rear Wheels

Preventative Measures

1. On SPED and Activity buses, tire pressure sensors and engine compartment heat sensors will be installed. Both will alarm driver
2. Working with VDOE to standardize recall procedure
3. Will work with schools to enhance evacuation drill procedures
 - a) Increase frequency
 - b) SPED
 - c) Midday to capture all students
 - d) Presentation