



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 11-001
Date Opened: 01/10/2011
Investigator: Peter Kivett
Approver: Richard Boyd
Subject: RPM's surging during pump mode
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: PIERCE MANUFACTURING
Products: 2007 Pierce Contender EV
Population: 500 (Estimated)

Problem Description: Engine RPM's fluctuate while fire truck is in pump mode which causes changes in water pressure at the hose nozzle

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	0	0	0
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	1	0	1

***Description of Other:** Caterpillar Product Improvement Program

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation is open.

Summary:

On August 18, 2010 Caterpillar submitted a product improvement program (PIP) for installing new engine software on certain C9 engines. The Office of Defects Investigations was made aware of this communication upon receipt of Caterpillar's September 579.5 communications which identified a Product Improvement Program for certain fire trucks with the C9 engine. The subject of the PIP was engine RPM's which could surge while the vehicle was in a water pumping mode which could cause a fluctuation in water pressure that is being directed onto a fire through a hose. The bulletin states that this condition in conjunction with other factors or circumstances could "result in a risk of personal injury or death."

ODI contacted Pierce to acquire fleets that may have experienced this condition and to obtain additional information. According to one fleet, one of their fireman had the hose "jerked" out of his hand and the fire hose became unmanageable to control. They have been dealing with this engine surge since purchasing the truck 3 years ago and on many occasions it has compromised their ability to control their fire hose and its efficiency.

ODI is concerned that the inherent nature of a non-properly functional fire hose (as a result of engine surge) has safety ramifications. This Preliminary Evaluation is opened to gather more information.