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**RECEIVED**

By Recall Management Division at 9:56 am, Oct 31, 2012



October 29, 2012

Nancy Lewis (NVS-215)  
Associate Administrator for Enforcement  
National Highway Traffic Safety Administration  
U.S. Department of Transportation  
1200 New Jersey Avenue, SE  
Washington DC 20590

Vehicle Recall: **Caterpillar C9 RPM surging while pumping  
Pierce Recall Number – 74B235**

Dear Ms. Lewis:

Caterpillar Inc. has determined that a potential safety issue exists with the standard engine software on Caterpillar C9 engines installed in certain Pierce manufactured fire trucks. Therefore, Pierce has decided that a defect which relates to motor vehicle safety exists in the motor vehicles listed below. We therefore furnish notification to the National Highway Traffic Safety Administration, in accordance with 49 CFR Part 573, Defect and Noncompliance Reports.

**1. Name of Manufacturer and Corporate contact:**

Pierce Manufacturing Inc.  
David Archer, Vice President of Engineering  
Phone: 920 832-3513  
FAX: 920 832-3526  
E-Mail: darcher@piercemfg.com

**2. Identification of Vehicle Classification:**

Make: Pierce  
Model Years Involved: 2006, 2007, and 2008  
Models: Contender  
Mfg. Date Beginning: 12/26/2006  
Mfg. Date Ending: 03/28/2008

**3. Number of Potentially Affected Vehicles: 9**

- VIN# 4P1CC01T87A006833
- VIN# 4P1CC01T17A006849
- VIN# 4P1CC01T87A006850
- VIN# 4P1CC01TX7A006851
- VIN# 4P1CC01T17A006852
- VIN# 4P1CC01T37A006853
- VIN# 4P1CC01TX7A007675
- VIN# 4P1CC01T58A008394
- VIN# 4P1CC01T37A007906

**4. Estimated Percentage of Vehicles Containing the Defect or Noncompliance:**

100%

**5. Description of the defect or noncompliance:**

Standard Caterpillar C9 engine software could cause the engine RPM's to surge while in PTO (pump mode). The reported surge could cause a fluctuation in water pressure that is being directed onto a fire through a fire hose. This water pressure fluctuation, in conjunction with other factors or circumstances, could result in personal injury or death.

**6. Chronology of Principal Events:**

July 2007 – Pierce received complaints of engine surging on fire trucks equipped with Caterpillar C9 engines. Vehicles inspected and no defects found.

December 2008 – Caterpillar received complaints of engine rpm's continuing to surge on Pierce fire trucks equipped with Caterpillar C9 engines.

Caterpillar technicians began an investigation into the issue, collected engine data while pumping water, developed new engine software and tested the new software.

August 2010 – Caterpillar Inc. issued Service Letter: Product Improvement Program for installing 365-6842 engine software on certain C9 engines installed in Pierce fire trucks, PI10816; Media number REBE6387-00.

August 2010 to December 2010 – PI10816 completed on all affected Pierce fire trucks.

January 2011 – PE 11-001 opened by ODI of US Department of Transportation

May 2011 – PE 11-001 response submitted by Pierce Mfg.

October 15, 2012 - Pierce and ODI discussed issue of NHTSA jurisdiction over the engine RPM surging while pumping water through a fire hose. Pierce Mfg. understood NHTSA's jurisdiction over these vehicles while they were in normal on-highway operation, but did not understand NHTSA's jurisdiction while operating at a fire scene in PTO mode.

October 19, 2012 – Pierce Mfg. decided to issue 573 Defect Information Report to summarize all the events and actions taken in response to the original engine RPM surging issues.

**7. Corrective Action:**

Caterpillar Inc. has updated the engine software in all the Pierce fire trucks identified as affected by this issue. All updates have been completed as of December 2010.

**8. Representative Notices:** The owner and dealer notification was completed as part of the software upgrade.

Sincerely,  
Pierce Manufacturing Inc.



David Archer  
Vice President of Engineering