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13V-039
(4 pages) 2nd Amendment

PREVOST

March 22, 2013

National Highway Traffic Safety Administration (NSA-10)
Associate Administrator for Enforcement
1200 New Jersey Avenue, S.E.
Washington, D.C, 20950
rmd.odi@dot.gov

Subject: Recall Campaign SR13-07
Throttle Software Modification
Some 2008-2013 Prevost vehicles
Safety-Related Defect Report
This report supersedes the report dated February 21, 2013

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act and 49 CFR Part 573 as it relates to a safety related defect.

Prevost has decided to conduct a voluntary safety recall on certain Prevost brand motor coaches as explained in the pages that follow.

Please feel free to call me if you have any questions regarding this information.

Best regards,

Deny Bertrand
Regulatory Compliance Director
Prevost
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Defect Report

Recall Campaign Number Prevost SR13-07

Subject: Throttle Software Modification

Vehicle Models Involved in the Recall:

- **Manufacturer:** Prevost
- **Models:**

  Some X3-45 Coaches
  Model Year 2008 up to 2013 incl
  From 2PCG33497**8**C72**9259** up to 2PCG3349X**D**C73**5437** incl.

  Some H3-41 & H3-45 Coaches
  Model Year 2008 up to 2013 incl.
  From 2PCH33496**8**C71**0948** up to 2PCH33490**D**C71**2351** incl.

  Some H3-45 VIP Coach Shells
  Model Year 2011-2013
  From 2PCVS3494**B**C71**1772** up to 2PCVS3496**D**C71**2361** incl.

  Some XLII-45 Entertainer Coach Shells
  Model Year 2009-2013
  From 2PCY33497**9**C72**9591** up to 2PCYS3499**D**C73**5436** incl.

  X3-45 VIP Coach Shells
  Model Year 2012-2013
  From 2PCBS3499**C**C73**5070** up to 2PCBS3498**D**C73**5417** incl.

Dates of Production: Starting May 16th 2007, ending **March 14, 2013**;

Recall Population

- Estimated number of vehicles potentially affected by the recall that was imported into the United States is one thousand thirty three (1,033)
- Approximate percentage of the total number of vehicles estimated to actually contain the defect is 100% or 1,033
- The recall population was determined using the production dates shown above and equipped with a Volvo engine

Description of the Defect
It has been determined that if the Limp-Home Mode feature is activated and the Idle Validation Switch (IVS) or its circuitry has an intermittent problem, the engine rpm may accelerate to 1750 rpms without driver pressing the pedal. If this occurs, this may present a risk of a vehicle crash under certain conditions if the driver does not have time to take action by applying the service brakes, switching the transmission into neutral, applying the park brake, or cutting off the ignition key.

Chronology in determining the Defect
The first report was received on a prototype vehicle (A-1244) in July 2010. The throttle pedal from this vehicle was removed and sent back to the supplier, Williams Controls, for further evaluation. The supplier evaluated the pedal and determined that there was no issue with the pedal as it was functioning correctly. Prevost was not able to recreate the reported condition at the time.
Prevost engineering discussed the event with the engineering group responsible for the Vehicle Electronic Control Module (VECU) from Volvo Bus Sweden and also Volvo Trucks North America in Greensboro to find out if similar cases have been observed on Volvo buses or trucks. Conclusion was that this has not been reported on Volvo buses or trucks and the Prevost's vehicle behavior was as expected. Prevost engineering investigation of this case was closed on that basis.

In May 2011, Prevost received a report on Coach A-1664 and through testing was able to recreate the condition by introducing an intermittent loss of connection at the IVS on an exemplar vehicle when the vehicle was in Limp-Home Mode. This was communicated back to the design responsible engineering group of the vehicle control unit for further evaluation. Feedback received both from EMS responsible and VECU responsible was that these ECUs behave as per specification.

In October 2011, Prevost Regulatory Affairs Manager informed representative of the Volvo Bus Product Safety Committee of the report

On October 26, 2011, Market Quality Report issued as instructed by representative of the Volvo Bus Product Safety Committee

From October 2011 to September 2012, further tests data have been exchanged between Prevost and VBC to resolve the issue

On October 8, 2012, the newly formed Volvo Group Safety Coordination Forum was asked to look at open market quality reports to determine whether they required further action or could be closed

On December 3, 2012, the Volvo Group Safety Coordination Forum discussed the Prevost Market Quality Report and determined that the RPM setting for this parameter (i.e. 1750) should be changed to 1200 rpm to address the condition

January 21, 2013, Technical Report issued by Prevost Service Manager on D-5421, which exhibited condition prior to delivery

January 29, 2013, Prevost received information that the parameter setting for the Limp-Home mode was being changed from 1,750 rpm to 1200 rpm

February 1, 2013, Review of Technical Reports at biweekly meeting prompted further discussions on the D-5421 report

February 6, 2013, Prevost sends preliminary safety-related defect report to NHTSA. Delivery stop initiated. Testing initiated to confirm that solution addresses the condition

February 21, 2013, Prevost submits revised safety-related defect report to NHTSA

March 12, 2013, Evaluation of 1200 rpm solution at Prevost's manufacturing facility

March 13, 2013 Evaluation results discussed by Product Safety Committee

March 14, 2013 Stop Delivery issued.

March 22, 2013, Prevost submits revised safety-related defect report to NHTSA

To date, 3 incidents have been reported but no vehicle crashes or accidents, injuries or fatalities

Description of the Remedy
The repair involves re-flashing the engine electronic control unit with software having new calibration settings for esc_PEDAL_ERROR_MAX_ESPD and pdc_IVS_PEDAL_MAX_PERC. These new calibrations are deemed as the optimum solution between allowing a safe deceleration of vehicle while providing a means to move the vehicle from the roadway. In addition, the wiring and connections between the accelerator pedal and Vehicle Electronic Control Unit (VECU) will be visually inspected and repairs as required.

The new parameter in the software will be introduced into production on March 26, 2013 and vehicles being held at the factory will be retrofitted with the new software prior to release.

Recall Schedule & Communications
Prevost will initiate a voluntary owner notification, and recall all affected vehicles.
The number, which has been assigned to this recall by Prevost, is **SR 13-07.**

Owner letters are scheduled to be mailed no later than May 6th, 2013.

An advance copy of the owner letter will be submitted to NHTSA for review and approval prior to release to the owners.