

RECEIVED

By Recall Management Division at 12:10 pm, Jun 05, 2013

VOLVO

13V-171
(4 pages) Supplemental

June 4, 2013

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

Subject: Recall Campaign SR13-80
Throttle Software Modification
Certain 9700 Volvo Buses
Safety-Related Defect Report
Revised information, replaces report submitted on May 1, 2013

Submitted electronically by email.

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.

I am sending this to you on the behalf of Volvo Bus Corporation who has decided to conduct a voluntary safety recall on Volvo 9700 motor coaches imported by Volvo Industrial de Mexico as explained in the pages that follow.

I have included additional information at NHTSA's request to expand on the chronology and to clarify the Volvo 9700 Bus is not substantially similar, as defined in 49CFR579.4, to Prevost motor coaches being recalled under Prevost safety recall SR13-07.

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

Best regards,



Tim LaFon
Director Regulatory Affairs
Volvo Group, Americas
7900 National Service Rd.
Greensboro NC, 27409
E-mail: timothy.lafon@volvo.com
Office: (336) 393-2233

Defect Report

Recall Campaign Number SR13-80

Subject: Throttle Software Modification

Vehicle Models Involved in the Recall:

- **Manufacturer:** Volvo Bus Corporation
- **Models:**
Certain 9700 Coaches
Model Year 2009 up to 2013 incl.

Dates of Production: Starting August 28, 2008 and ending April 19th 2013

Recall Population

- Estimated number of vehicles potentially affected by the recall in the United States is approximately 285. Important Note: This is still under review and may be changed. An addendum will be filed if the number is changed.
- Approximate percentage of the total number of vehicles estimated to actually contain the defect is 100%
- The recall population was determined using the production dates shown above

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

February 6, 2013: Prevost notified NHTSA of a Safety-Related Defect on certain Prevost vehicles involving the limp-home mode feature.

February 13, 2013: Volvo Bus Corporation opens an investigation to determine whether the same condition exists on Volvo 9700 model buses imported into the U.S.

February 18, 2013: Volvo 9700 discussed but believed to be not associated as there were no reports internal or external to Volvo of the condition on the 9700 in the US or Europe, and the chassis design and electrical system are not shared between Volvo Bus and Prevost (i.e. the vehicle designs are not substantially similar).

February 19, 2013: Test conducted on Volvo 9700 using the same test parameters used by Prevost. Test engineers were not able to reproduce the condition.

February 20, 2013: Test results shared with NHTSA on telephone conference.

February 20, 2013: Volvo Group Director Regulatory Affairs issues directive to do further testing and analysis to determine what is different between the Prevost and the Volvo 9700.

February 21, 2013: Discussion between Prevost engineering, Volvo Powertrain Engineering (responsible for Engine design including Engine Control Unit), Volvo Bus Corporation Engineering in Gothenburg Sweden (responsible for 9700 vehicle design including Vehicle Embedded Control Systems).

March 12, 2013 Volvo Group Director Regulatory Affairs meets with Prevost engineers to discuss test protocol for Volvo 9700 and identify test vehicles.

March 13, 2013: Three different versions of the Volvo 9700 required to be tested. US07, US 10, and US10+6 Engine Emission levels require testing. These vehicles are not available from manufacturing and required use of customer vehicles or retrofit of a vehicle to simulate.

March 18, 2013: Volvo Group Director Regulatory Affairs follows-up on testing request. Engineering reported test harness had to be made to support interface with Volvo 9700 Bus. A test box and harness to simulate/control the fault, and sequence of faults had to be developed as the Volvo Bus interfaces are different.

March 28, 2013: Prevost Service department reports that customer vehicles in Houston Texas have been secured for testing.

April 1, 2013: Confirmed that test engineer will be sent to conduct test in Houston TX. Travel arrangements are made.

April 5, 2013: Test conducted in Houston TX. Test engineer reports that he was not able to reproduce the condition.

April 16, 2013: Upon further analysis of the data files from the test that was conducted on April 5th, Volvo Powertrain Engineering in Hagerstown, Maryland discovered that if the sequence and timing were changed the condition could be reproduced some of the time. Information reported to Volvo Group Director Regulatory Affairs.

April 16, 2013: Volvo Group Director Regulatory Affairs informs manufacturing to stop delivery on currently manufactured Volvo 9700 buses (US OBD 13) pending further review.

April 19, 2013: Delivery stop issued.

April 26, 2013: Volvo Bus Corporation **holds Product Safety Committee meeting and** determines that a safety-related defect exists on Volvo 9700 model buses being imported into the U.S.

May 1, 2013, NHTSA notified that Volvo Bus Corporation will release a voluntary safety recall to address the suspect population of buses.

To date, there have been no reports of crash or injury, and there have been no warranty claims, field reports, or customer complaints.

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 **optimal** 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 **repaired** as required.

Recall Schedule & Communications

Volvo Bus Corporation will initiate a voluntary owner notification, and recall all affected vehicles. The number, which has been assigned to this recall, is SR 13-80.

Owner letters are scheduled to be mailed no later than July 1, 2013. **An advance copy of the owner notification letter will be sent to NHTSA for review and approval prior to release.**