



U.S. Department
of Transportation
National Highway
Traffic Safety
Administration

Memorandum

Subject: **TEST REQUEST: Battery Cable Failures**

Date:

JUN 19 2006

From: Kathleen C. DeMeter, Director
Office of Defects Investigation

Reply to
Attn. of

NVS-213
EA06-006

To: Michael Monk, Director
Vehicle Research and Test Center

This memorandum requests the Vehicle Research and Test Center (VRTC) to conduct testing as described below.

BACKGROUND: The Office of Defects Investigation is currently investigating multiple battery cable conditions that may result in either vehicle fire or stall incidents in model year 2005 Volvo XC90 sport utility vehicles (EA06-006). As a result of information gained during the PE, three distinct issues are being investigated at the EA level:

1. Loose battery cable attaching fastener to starter - 2 alleged stalls, 13 overheated battery cable events;
2. Mispositioned jack handle grounding to battery cable - 5 alleged fires.
3. Chafing of positive battery cable - 19 field reports from single source (no failures noted).

OBJECTIVE: The objective of the testing is to assess the potential effects of vehicle safety of each of the aforementioned issues.

1. Undertorqued battery cable attaching fastener to starter - simulate the condition and evaluate vehicle performance.
2. Mispositioned jack handle.
 - a. Assess potential for jack handle contact with battery cable contacts and possible countermeasures; and
 - b. Evaluate peer vehicles (batteries located in rear of vehicle) jack tool locations.
3. Chafing positive battery cable - survey local Ohio residents for inspection of battery cables in older / higher mileage vehicles.

TEST EQUIPMENT AND PROCEDURE: The test equipment and the procedure can be determined after further discussion between ODI and VRTC.

TEST VEHICLE(S): VRTC should obtain appropriate vehicles to conduct the testing.

ADDITIONAL INFORMATION: The investigator is Derek Rinhardt (Phone: 202 366-3642) who is available to discuss the details of the testing with your engineer.



FINAL REPORT: It is requested that the test work and draft report be completed to a schedule to be determined in discussion with ODL

cc:

Mr. Jeffrey Quandt, NVS-213

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