



Memorandum

U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

Subject: Test Request: Analysis of Rear Seat Attachment in Vehicle Crash Testing Date: June 12, 2012

From: Frank S. Borris, Director, Office of Defects Investigation Reply to: NVS-212mjl
Attn of: EA12-003

To: Roger Saul, Director
Vehicle Research and Test Center

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

BACKGROUND: The Office of Defects Investigation (ODI) is conducting an Engineering Analysis (EA12-003) concerning third row seat anchor failures due to corrosion in model year (MY) 2004 Ford Freestar and Mercury Monterey vehicles. The subject anchorages are attached to the rear wheel wells. ODI seeks to evaluate the potential occupant safety risks resulting from structurally degraded seat anchorages.

OBJECTIVES:

The primary objective of this test program is to evaluate the potential safety risks resulting from structurally degraded seat anchorages for the third row seats in certain crash modes. First, conduct a rear crash test similar to the tests specified by Federal Motor Vehicle Safety Standard No. 301, "Fuel System Integrity" of a subject vehicle without the seat anchor defect condition (baseline test) and a subject vehicle with the defect condition. The impact speed shall be between 30 and 50 mph, as determined through further discussion and consultation with pertinent staff, and fully instrumented crash dummies shall be placed in the rear seat. VRTC and its crash test contractor shall evaluate the occupant injury risk, including capturing various injury measures and a full occupant video of the test.

After the evaluation of the first crash test with the defect condition, additional tests, at different test speeds and/or in different crash modes, may be conducted.

In addition, ODI requests VRTC to inspect and evaluate several subject vehicles with reported defect conditions.

TEST VEHICLES: Potential test vehicles for this test program include MY 2004-2007 Freestar and Monterey vehicles exhibiting varying amounts of degradation at the rear seat anchorages. Other potential test vehicles include the Freestar/Monterey vehicles with little or no

degradation at the anchorages that can be manually disconnected on one or both sides to simulate field failure conditions.

TEST PROCEDURE/METHODOLOGY: VRTC shall determine the test procedures and methodology necessary to meet the objectives of this test program.

ADDITIONAL INFORMATION: The project engineer at ODI is Michael Lee who will discuss the details of the testing with your engineers.

SCHEDULE: We would like to have the testing completed by July 31, 2012.

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