



U.S. Department
of Transportation

Memorandum

**National Highway
Traffic Safety
Administration**

Subject: Test Request: Evaluation of Fuel Tank Leaks Date: March 18, 2013

From: Frank Borris, Director Office of Defects Investigation Reply to: NVS-212jfa Attn of: EA13-003

To: Roger Saul, Director Vehicle Research and Test Center

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

BACKGROUND: The Office of Defects Investigation (ODI) is conducting an Engineering Analysis (EA13-003) concerning gasoline fuel leaks in and around the fuel tank (tank) in model year 2003-2008 Mercedes Benz E-Class vehicles. Complainants report strong odors of gasoline, both inside and outside of their vehicles, particularly after refueling. Some report seeing fuel on the ground and others report seeing fuel on top of the tank around the fuel filter module. ODI has contacted many of the complainants by telephone in an effort to gather additional information and details regarding the nature and identification of the leak source in their vehicles. From discussions with complainants and in reviews of repair invoices, photographs, and field inspections, it appears that multiple leak sources could exist. The leaks appear to originate from the top of the tank and several components have been identified as possible leak sources. Specifically, they are the in-tank fuel filter module and seal (driver's side), the in-tank fuel pump module and seal (passenger's side), the fuel filling limiter valve and/or its connection to the onboard refueling vapor recovery vent hose (top of the tank, driver's side of the tank center line).

OBJECTIVES: The objectives of this test program are to identify the leak sources and evaluate each source separately and collectively (in combination) as to the potential volume of fuel leakage.

TEST SAMPLES: ODI has provided two field sample fuel tank and two field sample fuel filters to VRTC. ODI will continue to attempt to obtain more field sample parts from consumers.

RECOMMENDED APPROACH: VRTC should prepare a test plan designed to meet the above test objective. A flexible approach may be taken, but the ODI test monitor, Mr. John Abbott, should be kept informed of all developments that require substantial changes to the original test plan. John can be reached at john.abbott@dot.gov and on (202) 366-5221.

REPORTS: A test report shall be provided upon completion of testing.

SCHEDULE: We would like to have the testing completed by September 30, 2013.

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