



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# Memorandum

Subject: **Test Request:** Leak Test Gasoline Fuel Storage Tank

Date: **AUG 14 2003**

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

Reply to  
Attn. of:

NVS-212jfa  
EA03-008

To: Michael Monk, Director  
Vehicle Research and Test Center

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

**BACKGROUND:** On June 11, 2003, the Office of Defects Investigation (ODI) upgraded Preliminary Evaluation PE03-003 to Engineering Analysis EA03-008. The subject of the investigation is fuel leakage from the fuel storage tank in Volvo 850 vehicles. A review of the current 47 reports indicates that cracks develop in the plastic fuel tank thus allowing fuel to leak out. Most of the reports were not very specific as to the area of the tank where the leak occurred. However, nine of the reports indicate fuel leaked from a heat shield mounting boss that is attached to the fuel tank. ODI currently has one fuel tank from a 1993 subject vehicle in its possession and would like to have it tested to verify and identify the existence and source of the alleged leak.

**SUBJECT VEHICLES:** The subject vehicles are 1993 through 1996 Volvo 850 vehicles.

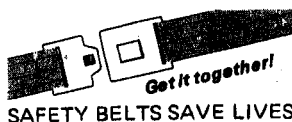
**ALLEGED DEFECT**<sup>1</sup>: shall refer to any breaks, cracks, failures, malfunctions or otherwise unsatisfactory performance of the fuel storage tank and/or related components, e.g., heat shield mounting or attachment points, "fuel pump unit," fuel level sensor, fuel inlet pipe, fuel delivery and return lines, fittings, etc., that result, or may result, in a leak or loss of fuel.

**TEST TANK:** ODI will furnish VRTC a fuel tank removed from a 1993 complaint vehicle. A copy of the complaint and the repair invoice is enclosed for your information.

**TEST OBJECTIVES:** The objective is to verify and identify the existence and source of any leaks from the tank.

**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

<sup>1</sup> Alleged defect as described in EA03-008 Information Request letter to Volvo.



Abbott, should be kept informed of all major developments that might require substantial changes to the original test plan. John can be reached on (202) 366-5221.

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

**SCHEDULE**: We would like to have the test work completed by November 2003. Please coordinate the test schedule with ODI.

#

Enclosure

# Public Citizen

Buyers Up • Congress Watch • Critical Mass • Global Trade Watch • Health Research Group • Litigation Group  
Joan Claybrook, President

September 12, 2002

Jeffrey W. Runge, M.D.  
Administrator  
National Highway Traffic Safety Administration  
U.S. Department of Transportation  
400 7<sup>th</sup> Street, S.W.  
Washington, DC 20590

568577

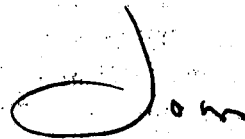
Dear Dr. Runge:

I recently learned that the plastic gasoline tank in my 1993 Volvo 850 was leaking gasoline and had it replaced. I do not think the tank was properly manufactured. The seams are separating enough to allow gasoline to leak which is a very dangerous problem as you know. I am delivering the gas tank removed from my car to Ken Weinstein and by this letter requesting an investigation by NHTSA of this safety defect.

It seems unusual for this to occur in my car since at nine years old I have driven it only 55,000 miles, very carefully and primarily city driving. The auto repair facility which replaced my gasoline tank told me that about three weeks ago it had to replace another Volvo 850 gasoline tank for another customer. I have no idea how long the gasoline tank has been leaking gas, but in view of the volatility of gasoline and the likelihood of sparks all over the highway igniting gasoline, this is a very dangerous situation. Also, this weak gas tank might be more likely to leak large amounts of gasoline if the car were hit from the rear. My auto repair facility is called "The Shop" on M Street, NW. You can talk to Jessie at 202-289-1400 if there are any questions.

Enclosed is a copy of the bill and my letter to Volvo. Also enclosed is a list from your database of Volvo fuel related complaints.

Sincerely,



Joan Claybrook

enc.

cc: Kenneth Weinstein

Ralph Nader, Founder

1600 20th Street NW • Washington, DC 20009-1001 • (202) 588-1000 • www.citizen.org

DEFECTS OFFICE  
INVESTIGATION

SEP 29 11:09 AM '02

RECEIVED

DEFECTS OFFICE  
INVESTIGATION

SEP 29 11:09 AM '02

RECEIVED

Call...

The Shop  
 European Auto Clinic, llc  
 1219 13th Street NW  
 Washington, DC 20005  
 202/289-1400



502321

POCK # 5296 9-9-02

NAME JOAN CLAYBROOK		SHIP TO 588-1000 X 7701	
ADDRESS 93 VOLVO 850 GLT AMT		ADDRESS	
CITY, STATE, ZIP		CITY, STATE, ZIP	

ORDER NUMBER OD/055323	DEPARTMENT	SALESPERSON	WHEN SHIP	TERMS	HOW SHIP	DATE 9/9/02
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QUANTITY	DESCRIPTION	PRICE	AMOUNT
	Replace leaking fuel tank - Drain fuel, remove tank, changeover heat shields, fuel pump, sender etc - Install new tank - Transfer fuel & CK - VVUS OK	3.0	195.00
	1 Fuel tank		332.00
	Renew wiper blades 2 Blades	14.45	28.90
	3. Adjust Hood catches - as well as possible	ST	555.90
		WDC	31.96
	Note * <u>Must order Hood Cable</u>	TL	587.86

BUYER: