



U.S. Department  
of Transportation

National Highway  
Traffic Safety  
Administration

# Memorandum

**Subject:** **TEST REQUEST:** 1995-1997 Lincoln Town Car / Ford Crown  
Victoria / Mercury Grand Marquis Rear brake line failure (EA03-012).  
Sent via fax transmission.

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

**To:** Michael Monk, Director  
Vehicle Research and Test Center

**Date:** SEP - 3 2003

**Reply to:** NVS-213bby  
**Attn. of:** EA03-012

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

## **BACKGROUND:**

The Office of Defects Investigation (ODI) has received 40 complaints of rear brake line failure in model year (MY) 1995 through 1997 Lincoln Town Car, Mercury Grand Marquis and Ford Crown Victoria vehicles, including 8 this year. An additional 192 complaints and 478 warranty claims have been received from Ford. ODI's analysis of data submitted by Ford has shown a disproportionate number of failures in approximately 95,000 MY 1997 Crown Victoria and Grand Marquis vehicles manufactured after March 19, 1997. Most of these reports appear to have been related to abrasive failure. However, complaint input to ODI suggests that corrosion may be a bigger contributor to the most recent failures in these and other subject vehicles.

On April 7, 1998, Ford notified ODI that it would be conducting an Owner Notification Program (Ford Campaign 98B19, NHTSA Safety Improvement Campaign 98I-001) for owner of certain MY 1995 through 1997 Crown Victoria model vehicles with police, taxi, and commercial fleet packages and Town Car vehicles with the livery package to address a concern with insufficient clearance between the brake line and the underbody front floor pan assembly which could cause wear of the brake lines. According to Ford, this could lead to brake fluid loss for the rear brakes and, potentially, increased stopping distances. Ford's campaign instructed dealers to inspect the brake lines for wear, install two new tube bundle clips, and check the brake lines for proper clearances. If the brake lines were worn, the damaged section of the brake line was replaced.

A search of ODI's complaint database for peer vehicle complaints, using the same brake line failure criteria as for the subject vehicles and the same model years identified only 1 complaint involving General Motors Caprice, Impala, 88, 98, and Regal vehicles and only 2 complaints involving Chrysler LH-cars.



**OBJECTIVE:**

The objective of this testing program is to determine the conditions of the rear brake line assemblies in the subject vehicles and some peer vehicles by conducting a survey and inspection program. The program should include the following elements:

- a. Identify a suitable sample set of subject vehicle owners in Ohio.
- b. Mail questionnaires to owners to determine vehicle mileage and experience with brake line failure, if any.
- c. Inspect appropriate numbers of subject vehicles with completed questionnaires based on model and build range. The table below provides target figures for the numbers of inspected vehicles in each group. VRTC and ODI will discuss whether additional vehicles should be added to the inspection once inspections have begun.

Group	Models	Build Range	Target Number of Vehicles Inspected
A1	Crown Victoria and Grand Marquis (excluding Police Interceptors and fleet vehicles)	Before 19-Mar-97	10
A2		After 19-Mar-97	20
B1	Town Car	Before 19-Mar-97	10
B2		After 19-Mar-97	10
C	Chevrolet Caprice and Impala	MY 1995-97	10

- d. Document the condition of the entire rear brake line assembly by inspecting and photographing the brake lines as well as measuring certain clearances with body parts that are in close proximity to the brake lines. Special attention to be given to the area where the brake line crosses over the stiffening rib at the #3 transmission cross member.
- e. Replace any brake lines that have failed or may be approaching failure.

**ADDITIONAL INFORMATION:**

The project engineer is Bruce York (Phone: 202-366-6938) who will discuss the details of the testing with your engineers. We would like to have VRTC's proposal of the procedure prior to test startup.

**FINAL REPORT:**

It is requested that the test work and draft report be completed as scheduling allows in coordination with ODI.