

Ford Motor Company

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OFFICE OF DEFECTS
INVESTIGATION

James P. Vondale, Director
Automotive Safety Office
Environmental & Safety Engineering

July 6, 2004

Mr. Kenneth N. Weinstein
Associate Administrator for Safety Assurance
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

04V-328
(3 pages)

Dear Mr. Weinstein:

Subject: Ford Recall No. 04S16 – Certain 2003 Model Year Ford Crown Victoria Police/Commercial and Lincoln Town Car Vehicles Used in Fleet Applications – Rear Axle Shaft Fracture

Summary

- Ford Action – Ford is conducting a voluntary safety recall involving certain 2003 model year Ford Crown Victoria Police/Commercial vehicles built from October 10, 2001 through December 4, 2002, and certain Lincoln Town Car Vehicles used in fleets and built from November 14, 2001 through December 3, 2002, to replace rear wheel bearings, axle shafts and seals because under the high load applications typically encountered in the service to which these types of vehicles are subjected, combined with their unique steering, suspension, and tires, the axle shafts may wear and ultimately fracture.
- Number of Vehicles Involved – Approximately 47,314 vehicles in the United States and Federalized Territories.
- Affect on Vehicle Operation – The subject vehicles typically input higher loads into the rear wheel bearings and axle shafts during fleet usage, as a result of the steering, suspension and tire design differences, as well as the vehicle usage patterns and vehicle weight. The increased loading and/or weight these vehicles experience during their high duty cycles results in increased stresses on the axle shafts and bearings. This may lead to early bearing failure and ultimately, axle shaft fracture. In the event of axle shaft fracture, the vehicle would lose drive function and would coast to a stop. The wheel likely would be retained in the wheel well by the brake caliper and brake rotor and vehicle control would be maintained.
- Service Procedure – Owners will be instructed to take their vehicles to a Ford or Lincoln-Mercury dealer to have the rear wheel bearings, seals and axle shafts replaced.

Attached is the detailed information required by the applicable portions of 49 CFR Part 573 – Defect and Non-Compliance Information Report.

Sincerely,

James P. Vondale
James P. Vondale
Attachment



49 CFR Part 573 – DEFECT INFORMATION REPORT
04S16 – CERTAIN 2003 MODEL YEAR FORD CROWN VICTORIA POLICE/COMMERCIAL
VEHICLES AND LINCOLN TOWN CAR VEHICLES USED IN FLEET APPLICATIONS

Pursuant to Part 573 of Title 49 of the Code of Federal Regulations, Defect and Noncompliance Reports, Ford Motor Company submits the following information concerning a safety recall action that it is voluntarily initiating.

573.6 (c) (2) -- Potentially Affected Vehicles

Vehicles potentially affected are 2003 model year Ford Crown Victoria Police/Commercial vehicles with model codes P70, P71 or P72, built at the St. Thomas Assembly Plant from October 10, 2001 through December 4, 2002; and Lincoln Town Car vehicles used in fleet applications with model codes M81 (ordered and sold to fleet customers only) or M84, built at the Wixom Assembly Plant from November 14, 2001 through December 3, 2002, as identified by specific VIN numbers.

Because these vehicles are not produced in VIN order, information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-800-392-3673) or by contacting a local Ford or Lincoln-Mercury dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database.

573.6 (c) (3) – Estimated Population of Vehicles Potentially Affected

Approximately 47,314 vehicles in the United States and Federalized Territories.

573.6 (c) (4) -- Estimated Percentage of Affected Vehicles with the Defect Condition

All of the subject vehicles may experience the condition if subjected to severe duty.

573.6 (c) (5) – Description of the Defect

The subject vehicles typically input higher loads into the vehicle chassis during fleet usage, including the wheel bearings and axles, as a result of the steering, suspension and tire design differences, as well as, the vehicle usage patterns and vehicle weight. The increased loading and/or weight these vehicles experience during their high duty cycles results in increased stress on the rear axle shafts and bearings. This may lead to early bearing failure and ultimately axle shaft fracture. In the event of axle shaft fracture, the vehicle would lose drive function and would coast to a stop. The wheel likely is retained in the wheel well by the brake caliper and brake rotor and vehicle control is maintained. There have been no reported accidents, injuries or fires attributed to this condition.

573.6 (c) (6) -- Chronology of Events

In December 2002, Ford issued a TSB to address reports of axle shaft/bearing wear on commercial vehicle applications. At that stage of the investigation, noise, vibration and seal leaks were the customer symptoms of the axle shaft wear. When the TSB was released, Ford engineering was not aware of any allegations of axle shaft fracture.

573.6 (c) (6) – Chronology of Events (Continued)

In September 2003, Ford engineers became aware of a single alleged axle shaft fracture on a Crown Victoria Police Interceptor operated by the City of Philadelphia. Subsequent analysis determined that the fracture was likely caused by severe axle shaft/bearing wear resulting in bearing failure, and ultimately axle shaft fracture.

On January 22, 2004, NHTSA opened a Preliminary Evaluation investigation (PE04-010) into alleged premature axle shaft wear and/or fracture. Ford's April 8, 2004 response to the agency's PE information request provided 16 reports alleging rear axle shaft fracture involving vehicles used in commercial and fleet applications. As a result of Ford's investigation during and subsequent to the PE response, it was determined that in certain commercial and fleet applications where the vehicle chassis is subjected to higher loads as a result of the steering, suspension and tire design differences from civilian vehicles, as well as unique vehicle usage patterns and vehicle weight, the axles and bearings are exposed to higher stresses, and premature axle wear and bearing failure can occur. Subsequent to wheel bearing failure, if symptoms of noise, vibration and fluid loss are not noticed or are ignored, the axle shaft may potentially fracture.

573.6 (c) (8) – Service Program

Dealers will be instructed to replace rear wheel bearings, seals and axle shafts on Ford Crown Victoria Police/Commercial vehicles with model codes P70, P71 and P72, and Lincoln Town Car vehicles with model codes M81 (ordered and sold to fleet customers only) and M84.

There will be no charge to owners for this service. Mailing of owner notification letters will begin on July 13, 2004 and be completed on or before July 27, 2004. Ford's general reimbursement plan for the cost of remedies paid for by vehicle owners prior to notification of a safety recall was provided to the agency on February 28, 2003.

573.6 (c) (9) – Press statement and Dealer/Owner Letters

Ford does not at this time plan to make a statement to the media concerning the subject matter of this action. A copy of the Notification letters to dealers and owners from Ford will be forwarded to the agency when available.

573.6(c) (11) – Recall Number

Ford has assigned recall number 04S16 to this action.

573.13 (c) (2) - Ending Date for Reimbursement Eligibility

The ending date for reimbursement eligibility for cost of remedies paid for by vehicle owners per Ford's general reimbursement plan is August 6, 2004.