



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 10-016
Date Opened: 05/13/2010
Principal Investigator: Kerrin Bressant
Subject: Rear Axle Beam Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: FORD MOTOR COMPANY
Products: 1999-2003 Ford Windstar
Population: 900,000 (Estimated)

Problem Description: Fracture of a rear suspension axle could result in loss of vehicle control.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	234	TBD	TBD
Crashes/Fires:	2	TBD	TBD
Injury Incidents:	0	TBD	TBD
Fatality Incidents:	0	TBD	TBD

ACTION / SUMMARY INFORMATION

Action: A Preliminary Evaluation has been opened.

Summary:

The Office of Defects Investigation has received 234 complaints alleging rear axle failure in Model Year 1999 through 2003 Ford Windstar minivans, including two alleging that the failures resulted in minor crashes. Over half of the complaints (128) allege a complete fracture of the axle beam. Fifty-six complaints indicate that the axle failure occurred at speeds of 40 miles per hour or greater.

One crash occurred while the vehicle was traveling on a highway. The rear axle reportedly "snapped in half" after the vehicle struck a pot hole. The driver indicated that both rear tires "blew" (note that axle fracture often causes the tires to achieve a severe negative camber - with the top of the tire tilted inward - resulting in contact with the fender well). The vehicle then struck a guard rail because of difficulty controlling the vehicle while braking to a stop. The second crash was also alleged to have involved a complete axle fracture, in this case resulting in a low-speed curb impact.

The rear axle beam in the subject vehicles is an inverted "U" channel design, which appears to provide a collection point for road salt slurry, resulting in corrosion that progressively weakens the part until it fractures. Approximately 96 percent of the complaints (225), 94 percent of the complete fractures (121), 96 percent of the high-speed incidents (54) and both alleged crashes are from "Salt-Belt" states. In addition to the two alleged crashes, 14 additional complaints alleged vehicle control concerns associated with the rear axle failure incident.

A Preliminary Evaluation has been opened to assess the scope, frequency and safety consequences of the alleged defect in the subject vehicles.