

ODI RESUME

INVESTIGATION : EA94-022 DATE CLOSED: March 2, 1995
SUBJECT : Loss of Power Steering Assist
PROMPTED BY : PE94-032

PRINCIPAL ENGINEER: L. Strickland *L. Strickland*

MANUFACTURER : Ford Motor Company
MODEL : Crown Victoria Equipped with Police Package

MODEL YEARS : 1992 - 1993 VEHICLE POPULATION: 54,776

SYNOPSIS: The alleged defect in this investigation refers to unforwarned and significantly diminished level of steering power assist, including but not limited to, circumstances in which the power steering assist system may appear to have failed completely.

ACTION: Close this Engineering Analysis.

BRCH CHF

Richard P. Boyd
March 2, 1995
DATE

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W. W. W.
March 2, 1995
DATE

SUMMARY: To fully evaluate the issues involved in this investigation, ODI conducted a comprehensive analysis involving:

- o Surveys of Law Enforcement Agencies
Two notices were broadcast over the nationwide police electron telecommunication system; Information Requests were sent to 9 Law Enforcement Agencies; and meetings were held with two police agencies.
- o Accident Reconstruction
NHTSA contracted with an independent engineering firm to have all accidents reconstructed that were allegedly caused by this phenomena.
- o Accident Data Analysis
NHTSA's National Center for Statistics and Analysis conducted a review of State Data and the Fatal Accident Reporting System.
- o Manufacturer Inputs
ODI staff met with Ford to discuss technical merits of the investigation and submitted two information requests for data.
- o ODI Database Analysis
ODI conducted a telephone survey of all complaints in its database which appeared to be related to this issue.

V. W. W. 3/2/95

o Testing

ODI conducted extensive testing to:
verify and quantify the phenomenon using instrumented
vehicles and test drivers on a precision maneuvers driving
course;
examined the human factors aspects of the phenomenon using
34 police officer volunteers on a test track;
conducted slalom and lane change tests; and
conducted drop-throttle tests and static tests.

After reviewing all of the data obtained during this analysis, ODI has determined that the particular performance characteristics of the subject steering system may present a brief loss of power assist during extremely aggressive but foreseeable driving maneuvers. However, the collective body of information disclosed and developed during this investigation shows that this performance does not represent an unreasonable risk to motor vehicle safety within the meaning of the National Traffic and Motor Vehicle Safety Act. Therefore this investigation is closed. Detailed information on all aspects of this investigation is contained in the EA Closing Report.

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