



ODI RESUME

U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

Investigation: PE 07-057
Date Opened: 11/15/2007 Date Closed: 03/14/2008
Principal Investigator: Bruce York
Subject: Violent Front End Oscillation

Manufacturer: Ford Motor Company
Products: 2005-2007 F-250 & F-350 Super Duty 4X4 Vehicles
Population: 520,909

Problem Description: Severe front suspension and steering wheel oscillations after the vehicle traveled over an uneven road surface.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	78	1863	1941
Crashes/Fires:	1	3	4
Injury Incidents:	1	2	3
# Injuries:	1	2	3
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	Confidential	Confidential	Confidential

*Description of Other: Related EWR field reports.

Action: The Preliminary Evaluation has been upgraded to an Engineering Analysis (EA08-007).

Engineer: <u>Bruce York</u>	Date: <u>03/14/2008</u>
Div. Chief: <u>Richard Boyd</u> <i>RB</i>	Date: <u>03/14/2008</u>
Office Dir.: <u>Kathleen C. DeMeter</u>	Date: <u>03/14/2008</u>

Summary: ODI has received 78 consumer complaints of severe suspension and steering wheel shimmy and oscillations commencing after the subject vehicles traveled over an uneven road surface. The majority of these incidents occurred at speeds of 50 mph or greater. Thirteen of the complaints received by ODI allege loss of steering control and that the vehicle changed driving lanes uncontrollably. Four of the complaints received by ODI allege that the vehicle left the road surface as a result of the violent suspension and steering wheel oscillations. In one case the consumer alleges that after the vehicle left the road surface, it crashed into a wooded area.

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Additional factors contributing to the opening of this EA were Early Warning Field Reports, submitted by FORD, describing suspension shimmy/oscillations and a Ford TSB (07-10-10) describing the suspension shimmy issue and how to repair the problem.

Ford has described shimmy as "self-excited oscillation of the steering wheels with accompanying wheel tramp".

This PE has been upgraded to an Engineering Analysis (EA) to determine if the shimmy condition that occurs on the subject vehicles creates a condition where the vehicle becomes difficult to control or startles the driver, thus presenting a safety risk.