



# ODI RESUME

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

Investigation: PE06-011  
Date Opened: 02/27/2006 Date Closed: 06/23/2006  
Principal Investigator: Scott Yon  
Subject: Engine Stalling

Manufacturer: Ford Motor Company  
Products: MY 1999 - 2001 Ford Super Duty and Excursion w/7.3 L Diesel  
Population: 716,089

**Problem Description:** The engine stalls (stops running) without warning due to a failure of the cam position sensor and may or may not restart.

## FAILURE REPORT SUMMARY

|                     | ODI | Manufacturer | Total   |
|---------------------|-----|--------------|---------|
| Complaints:         | 68  | 755          | 821     |
| Crashes/Fires:      | 7   | 2            | 9       |
| Injury Incidents:   | 1   | 0            | 1       |
| # Injuries:         | 2   | 0            | 0       |
| Fatality Incidents: | 0   | 0            | 0       |
| # Fatalities:       | 0   | 0            | 0       |
| Other*:             | 0   | 166,384      | 166,384 |

\*Description of Other: Potentially related warranty claims

Action: PE06-011 has been upgraded to an Engineering Analysis (EA06-012).

Engineer: D. Scott Yon *DSC* 6/29/06 Date: 06/23/2006  
Div. Chief: Jeffrey L. Quandt Date: 06/23/2006  
Office Dir.: Kathleen C. DeMeter Date: 06/23/2006

**Summary:** The cam position sensor (CPS) provides a critical signal to the subject vehicle (SV) engine management system, the loss of which results in an engine stall. During PE06-011, Ford stated in their response to ODI that it is continuing to investigate allegations of CPS related engine stall and further advised that an update will be provided upon completion of the investigation.

Ford data shows that 20% of the 716,000 SVs are equipped with manual transmissions which are capable of back-driving the engine when a stall occurs; power assisted steering and braking are not lost during engine back-drive. Ford data also indicates that back-drive occurs in automatic transmission vehicles above certain road speeds.

The manufacturer reports noted reference 755 unique vehicles; 2 are duplicative of ODI reports. In its review of customer and field reports, Ford identified some 800 reports alleging one or more engine stalls potentially related to a CPS failure in these 755 vehicles (Ford's 'A' Category reports). ODI has not completed its review of these or other Ford reports, nor has it confirmed this count. All but one of the 9 crash allegations appear to be minor in nature although ODI is still investigating these crash/injury allegations and whether or not they involve a CPS failure. Based on early assessment of the approximately 166,000 subject vehicle warranty claims Ford paid, there appears to be variability in claim rates between certain SV production periods; an explanation for this has not been identified. Ford reviewed a sample of the warranty claims and indicated that about half may involve a stall due to CPS failure; ODI has yet to confirm this assessment.

The investigation is therefore upgraded to Engineering Analysis EA06-012 so that ODI can continue to investigate the scope, frequency and consequences of CPS related engine stalling.

*Handwritten notes:*  
11/3  
6-27-06