## **ABBOTT**

# EA02-014

<u>DATE</u>	SUBJECT		PAGE NUMBERS
07-31-02	OPENING RESUME (PROMPTED BY PE02-032)		(2)
11-13-02	CLOSING RESUME	RECALL 02V-288	(3-4)

# ODI Action Number: EA02-014

Date: 07-31-2002

Subject: FORD MOTOR COMPANY

2000 - 2002 FORD FOCUS

#### ALLEGED ENGINE COMPARTMENT FIRES FAILURE

This file contains consumer letters received by the National Highway Traffic Safety Administration, which complain of the alleged defect that is the subject of this Engineering Analysis. It also contains correspondence between this agency and the manufacturer on the subject. Portions of that correspondence may be withheld where the manufacturer has claimed that they are confidential pursuant to the Freedom of Information Act, 5 U.S.C. § 552(b)(4), which exempts from disclosure confidential commercial and financial information. Additional documents relating to this Engineering Analysis may exist, but have not been included in this public file.

If you have any information or concerns you would like to discuss with NHTSA staff, please call the

## TOLL FREE AUTO SAFETY HOTLINE

800-424-9393

(In the Washington, DC metropolitan area, please call 202-366-0123)

Also, if you wish to discuss the investigation with NHTSA staff, the HOTLINE contact representative will have a technical staff member return your telephone call.



U.S. Department of Transportation

National Highway Traffic Safety Administration

#### **ODI RESUME**

INVESTIGATION: EA 02-0 | 4

SUBJECT: Engine Compartment Fires

PROMPTED BY: PE02 032

DATE OPENED: 31-JUL-02

PRINCIPAL INVESTIGATOR: John Abbott

MANUFACTURER: Ford Motor Company

MODEL(S): Focus

MODEL YEAR(S): 2000 through 2002 VEHICLE POPULATION: 690,045

PROBLEM DESCRIPTION: Engine compartment fires on the driver's side in the area of the

battery.

#### FAILURE REPORT SUMMARY

	ODI	MANUFACTURER	TOTAL		
COMPLAINTS:	9	61*	70		
CRASHES:	0	0	0		
INJ CRASHES:	0	0	0		
# INTURIES:	0	0	0		
FAT CRASHES	0	0	0		
# FATALS	0	0	i o		
OTHER:	0	286	286		

\* Manufacturer complaints include Owner, Field, Lawsuit, and Subrogation claims.

OTHER: Warranty claims of fire and "scorched or melted components, smoke, or a burning odor".

ACTION: Open Engineering Apalysis.

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SUMMARY: The Office of Defects Investigation (ODI) opened this investigation on March 12, 2002 based on seven reports of fires starting in the area of the battery in the engine compartment on the subject vehicles. The reports indicated fire emanating from the battery area, as well as melted battery cable insulation and other parts adjacent to the battery. Since opening the investigation ODI has received two additional reports.

In its response to ODI's information request letter, Ford provided information regarding 61 additional reports and 286 warranty claims relating to the alleged defect.

This investigation has been upgraded for further analysis.

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## U.S. Department of Transportation

National Highway Traffic Safety Administration

### **ODI RESUME**

INVESTIGATION: EA02-014

DATE OPENED: 31- JUL-02

DATE CLOSED 13 - NOV-02

SUBJECT: Engine Compartment Fires

PROMPTED BY: PE02-032

PRINCIPAL INVESTIGATOR: John Abbott

MANUFACTURER: Ford Motor Company

MODEL(S): Fecus

MODEL YEAR(S): 2000 and 2001 with Zetec engines built between July 19,1999 and

May 31, 2001.

VEHICLE POPULATION: 291,854

PROBLEM DESCRIPTION: Engine compartment fires on the driver's side in the area of the

battery.

#### FAILURE REPORT SUMMARY

	ODI	MANUFACTURER	TOTAL		
COMPLAINTS.	14	56*	70		
CRASHES:	0	0	0		
INJ CRASHES:	0	0	0		
# INJURIES:	0	0	0		
FAT CRASHES	0	0	0		
#FATALS	0	0	0		
OTHER;	0	286	286		

<sup>\*</sup> Manufacturer complaints include Owner, Field, Lawsuit, and Subrogation claims.

OTHER: Warranty claims of fire and "scorched or melted components, smoke, or a burning odor."

ACTION: This Engineering Analysis is closed. Ford has notified the agency it will conduct a safety recall. The assigned NHTSA recall number is 02Y-288.

INVESTIGATOR: La. Chart

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SUMMARY: The Office of Defects Investigation (ODI) opened this investigation on March 12, 2002 based on seven reports of fires starting from the area of the battery in the engine compartment. The reports indicated fire emanating from the battery area, as well as melted battery cable insulation and other parts adjacent to the battery. The investigation was upgraded on July 31, 2002 to Engineering Analysis EA02-014 for further study.

By letter of November 4, 2002, Ford notified the agency that it will conduct a safety recall on certain production of the subject vehicles.

(Continued on next page)

1/12/02

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**Problem Description:** Ford found that the insulation on misrouted battery cables could become damaged over time and result in heat or fire damage to the vehicle. The following is the "Description of the Defect" as stated in 573.5 (c) (5) of Ford's November 4, 2002 Defect Information Report<sup>1</sup>.

Loose or broken attachments and misrouted battery cables could lead to the cable insulation being damaged. This in turn may cause the battery cables to short resulting in heat damage. In the vast majority of cases, customers have sought repairs for symptoms other than heat damage such as the "check engine" light being illuminated or the vehicle failing to start; however, smoke melting, or fire may occur.

**Recall Scope**: The affected vehicle scope involves 2000 and 2001 model year vehicles equipped with ZETEC engines built between July 19, 1999 and May 31, 2001, inclusive, at the Wayne Assembly Plant, and between October 4, 1999 and May 31, 2001, inclusive, at the Hermosillo Assembly Plant. ZETEC equipped vehicles produced after May 31, 2001 utilized different components that are not susceptible to the misrouting that occurred in the recall population.

Focus vehicles equipped with the Split Port Induction (SPI) engine were not included in this recall because different battery cables and cable routing were used on vehicles produced with the SPI engine<sup>2</sup>.

<u>Recall Remedy</u>: Affected vehicle owners will be notified to take their vehicles to Ford or Lincoln-Mercury dealers to have the battery cables inspected for damage, routing, and proper torque at the terminal ends. Battery cables will be rerouted; retainers installed, and damaged battery cables replaced as necessary.

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<sup>&</sup>lt;sup>1</sup> Please see Defect Information Report dated November 4, 2002 for details.

<sup>&</sup>lt;sup>2</sup> Please see November 12, 2002 Addendum to November 4, 2002 Defect Information Report for details.