U S. Department of Transportation
National Highway Traffic Safety Administration

ODI RESUME

Investigation: EA10-002
Prompted by: RQ09-002
Date Opened: 01/14/2010
Principal Investigator: Kyle Bowker
Subject: Engine Compartment Fire

Manufacturer: Ford Motor Company, Mazda Motor Corp., Mazda North American Operations
Products: MY2001-2004 Ford Escape and Mazda Tribute
Population: 542,018

Problem Description: Alleged non-crash fire originating in the engine compartment at or near the anti-lock braking system (ABS) control module after the recall remedy had been applied.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	11	80	86
Crashes/Fires:	11	80	86
Injury Incidents:	0	1	1
# Injuries:	0	1	1
Fatality Incidents:	0	0	0
# Fatalities:	0	0	0
Other*:	0	0	0

*Description Of Other:

Action: An Engineering Analysis has been opened.

Engineer: *Kyle M. Bowker* KMB Date: *01/14/2010*
Div. Chief: *Jeffrey L. Quandt* Date: *01/14/2010*
Office Dir.: *Kathleen C. DeMeter* Date: *01/14/2010*

Summary: In letters dated March 30, 2007, Ford Motor Company (Ford) and Mazda North American Operations (Mazda) notified the agency that they will conduct recalls 07V-156 and 07V-157, respectively, to remedy a safety defect that may result in fire in a wiring connector used in certain model year (MY) 2001-2004 Ford Escape and Mazda Tribute vehicles equipped with ABS. The recall campaign prescribes an inspection of the subject components, which shall be repaired or replaced only if necessary. If the subject vehicle passes the visual inspection then the recall instructs the technician to apply electrical grease (Ford Part Number XG-12) to the ABS module connector and verify system operation. To date, approximately 388,500 subject vehicles (71.7% of the total recall population) have been serviced under the recall campaign, the vast majority of which (373,985) passed the visual inspection and received only the electrical grease applied to the ABS module connector.

The agency is aware of at least 86 unique subject vehicles that have reportedly experienced non-crash fire incidents originating in the engine compartment at or near the ABS control module some time after the vehicle was serviced under the subject recall. The manufacturer has provided some information that indicates certain vehicles were improperly serviced under the subject recall as evidenced by the factory wire tie-wrap not being removed from the wiring harness (which indicates a proper inspection could not have been performed) and by incorrect grease being applied, incorrect amounts of grease, and even instances where no grease was applied to the ABS module connector. Also, there remain some questions regarding the severity of the reported fire incidents. The manufacturer contends that most reported fires were actually non-fire thermal events with damage limited to the subject components and that most vehicles are repaired and returned to service. However, the trend appears to be ongoing with 5 reported incidents having occurred in the past 6 months. Accordingly, this Engineering Analysis has been opened to further assess the effectiveness of the recall remedy.