



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 11-016
Date Opened: 04/27/2011
Investigator: Peter Ong
Approver: Frank Borris
Subject: Rear Liftgate Window Glass Breakage
Date Closed: 08/18/2011
Reviewer: Scott Yon

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: FORD MOTOR COMPANY
Products: 2010-2011 Ford Escape and Mercury Mariner
Population: 387,354
Problem Description: The complaints alleged that the liftgate glass shattered spontaneously, either while opening or closing the liftgate.

FAILURE REPORT SUMMARY

| | ODI | Manufacturer | Total |
|----------------------------|-----|--------------|-------|
| Complaints: | 22 | 274 | 296 |
| Crashes/Fires: | 0 | 0 | 0 |
| Injury Incidents: | 3 | 12 | 15 |
| Number of Injuries: | 4 | 14 | 18 |
| Fatality Incidents: | 0 | 0 | 0 |
| Other*: | 0 | 341 | 341 |

*Description of Other: Warranty claims related to liftgate glass breakage issue

ACTION / SUMMARY INFORMATION

Action: Close this Preliminary Evaluation (PE)

Summary:

In its response to the agency, Ford acknowledged a higher than normal level of glass breakage incidents in the model year (MY) 2010 to early-build MY 2011 subject vehicles. The incidents occurred when the liftgate glass was being opened, or more typically while being closed, but in both cases while the vehicle was stationary, i.e., not moving on the roadway. Additionally failures often occurred during early morning hours when ambient and/or liftgate glass temperatures may have been lower.

Ford advised that it investigated the failures but failed to identify an anomaly in the glass manufacturing process (which is often a factor in glass breakage trends ODI investigates) that could explain the reports. It did however identify a potential thermal expansion/compression condition in the mounting of the rear wiper motor to the liftgate glass. Starting at MY 2008 vehicle production the motor was attached to the glass using an adhesive. Ford revised that design to a "nut and bolt" type attachment in October 2010, during MY 2011 vehicle production. ODI's review of Ford data indicates that vehicles built after this change exhibit lower glass breakage rates.

Among the 296 consumer complaints on the subject vehicles, ODI identified 15 injury incidents resulting in a total of 18 alleged injuries. All the injuries were minor in nature and consisted mainly of superficial skin cuts or minor lacerations, with two of the injury incidents occurring when vehicle owners were cleaning up broken glass. Additionally both the injury rate and report rate (including warranty claims) are low in comparison to similar investigations resulting in safety recalls (see PE04-045, MY 2002 Ford explorer liftgate glass failure, which resulted in NHTSA safety recall 04V442).

In November 2010 Ford issued Technical Service Bulletin (TSB) 10-22-10 to address reports of liftgate glass breakage on all MY 2010 vehicles, and MY 2011 vehicles built through 10/15/2010, the date the above design revision was implemented. The TSB enables owners of affected vehicles to have a broken liftgate glass replaced under normal vehicle warranty, which would not otherwise be a warrantable failure, with the revised design liftgate glass.

A safety-related defect has not been identified at this time and further use of agency resources does not appear to be warranted. Accordingly, this investigation is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. The agency will monitor this issue and reserves the right to take further action if warranted by the circumstances.