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December 5, 2011

Ms. Nancy Lewis
Associate Administrator for Enforcement
National Highway Traffic Safety Administration
1200 New Jersey Avenue SE, Room W45-306
Washington, DC 20590

Dear Ms. Lewis:

Subject: Ford Motor Company (Ford) Recall No. 11S23 - Certain 2010 and 2011 Model Year Ford Fusion and Mercury Milan vehicles originally equipped with 17 inch steel wheels – wheel separation

Summary

- Ford Action - Ford is conducting a voluntary safety recall involving certain 2010 and 2011 model year Ford Fusion and Mercury Milan vehicles originally equipped with 17 inch steel wheels and built from April 1, 2009, through April 30, 2009, and from December 1, 2009, through November 13, 2010, to address the potential for wheel separation. Vehicles equipped with alloy wheels are not affected.
- Number of Vehicles Involved - Approximately 128,616 vehicles in the United States and federalized territories are potentially affected. Ford distributed approximately 2,940 service steel wheels to dealers.
- Effect on Vehicle Operation - If multiple stud fractures occur at a wheel location, analysis of reports indicates that the operator may observe vehicle vibration. If the vibration is ignored and the vehicle continues to be driven the remaining studs may fracture, resulting in a wheel separation.
- Service Procedure - Owners will be notified by mail and instructed to take their vehicles to a Ford or Lincoln dealer to have the lug nuts replaced on all four wheels, and to have the rear brake discs inspected for wheel mounting surface flatness and replaced, if required. Ford will instruct dealers to notify customers who purchased service steel wheels, where information is available, to return vehicles for lug nut replacement.

The detailed information required by the applicable portions of 49 CFR Part 573 - Defect and Non-Compliance Information Report is attached.

Sincerely,

Steven M. Kenner



49 CFR Part 573 -- DEFECT INFORMATION REPORT
11S23 -- CERTAIN 2010 AND 2011 MODEL YEAR FORD FUSION AND MERCURY MILAN
VEHICLES ORIGINALLY EQUIPPED WITH 17 INCH STEEL WHEELS -- WHEEL SEPARATION

Pursuant to Part 573 of Title 49 of the Code of Federal Regulations, Defect and Non-Compliance Reports, Ford Motor Company submits the following information concerning a safety recall action that it is voluntarily initiating.

573.6 (c) (2) - Potentially Affected Vehicles

Vehicles potentially affected are certain 2010 and 2011 model year Ford Fusion and Mercury Milan vehicles originally equipped with 17 inch steel wheels and built at the Hermosillo Stamping and Assembly Plant (HSAP) from April 1, 2009, through April 30, 2009, and from December 1, 2009, through November 13, 2010.

This action only affects vehicles equipped with 17 inch steel wheels. Vehicles equipped with alloy wheels are not affected.

Because these vehicles are not produced in VIN order, information as to the applicability of this action to specific vehicles can best be obtained by either calling Ford's toll-free line (1-866-436-7332) or by contacting a local Ford or Lincoln dealer who can obtain specific information regarding the vehicles from the Ford On-line Automotive Service Information System (OASIS) database.

Service steel wheels built between April 2010 and September 2010 are also included in this action. These service wheels were likely sold between mid-April 2010 and mid-November 2010.

Steel Wheel Supplier:

Hayes Lemmerz International, Inc.
15300 Centennial Drive
Northville, MI 48168
734-737-5000 (main switchboard)
Contact: Mr. Thomas Heck, Director of Engineering
Country of Origin: United States

Rear Brake Disc Supplier:

Brembo North America, Inc.
47765 Halyard Drive
Plymouth, MI 48170
734-468-2118
Contact: Mr. John Altgelt, Sales Manager
Country of Origin: Mexico

573.6 (c) (3) - Estimated Population of Vehicles Potentially Affected

Approximately 128,616 vehicles in the United States and federalized territories are potentially affected. Ford distributed approximately 2,940 service steel wheels to dealers.

573.6 (c) (4) - Estimated Percentage of Affected Vehicles with the Defect Condition

Unknown.

573.6 (c) (5) - Description of the Defect

Steel wheel equipped vehicles built within the date parameters identified above may experience a reduction in wheel stud clamp load because of the separate root causes identified below. Reduction in wheel stud clamp load in these vehicles may induce wheel stud bending fatigue which could result in stud fractures. Fracture of all studs at a wheel location could result in wheel separation.

Ford has identified two separate root causes that can lead to reduction in clamp load.

- 1) Steel wheel – Certain steel wheel mounting pads may have been stamped such that they lack the necessary concavity. This condition may contribute to a reduction in clamp load when the wheel is attached to the wheel hub and may induce bending fatigue in the wheel studs.
- 2) Rear brake disc – The wheel mounting face on certain rear brake discs may not have been machined properly. The mis-machining can result in the wheel mounting face being convex. A convex disc may contribute to a reduction in clamp load when the wheel is attached to the wheel hub and may induce bending fatigue in the wheel studs.

As of September 30, 2011, Ford was aware of one front wheel separation and five rear wheel separations that may be attributable to these conditions.

573.6 (c) (6) - Chronology of Events

In August 2010, HSAP identified an in-plant concern during the lug nut torquing operation where the rear wheel studs were fracturing on vehicles equipped with steel wheels. An extensive investigation was initiated to understand the root cause of the in-plant concern and identify any reports in the field. This internal investigation was ongoing when the National Highway Traffic Safety Administration (NHTSA) opened a preliminary evaluation (PE11-003).

NHTSA opened PE11-003 on January 21, 2011, based on four vehicle owner questionnaires (VOQs). PE11-003 included all 2009 through 2011 model year Fusion, Milan, and MKZ vehicles and sought reports and claims related to wheel stud fracture, wheel separation, improperly fastened lug nuts, or an excessive change/relaxation in wheel fastening clamp load following tightening of lug nuts.

Ford responded to NHTSA's PE inquiry on March 25, 2011, and continued its investigation into this subject.

NHTSA subsequently upgraded its investigation to an engineering analysis (EA11-009) on July 26, 2011. NHTSA had received seven additional VOQs since the opening of the PE investigation and cited 149 manufacturer claims and reports in its upgrade resume.

At the agency's request, Ford provided a data update on September 23, 2011, that included all reports and claims received by Ford through August 31, 2011.

Ford met with Office of Defects Investigation personnel on October 21, 2011, and November 9, 2011, to further discuss the investigation, reports, and Ford's ongoing testing and analysis related to the investigation.

On November 28, 2011, Ford's Field Review Committee reviewed the issue and approved a field action.

573.6 (c) (8) - Service Program

Owners will be notified and instructed to take their vehicles to a Ford or Lincoln dealer to have the lug nuts replaced on all four wheels, and to have the rear brake discs inspected for wheel mounting surface flatness and replaced, if required. Ford will instruct dealers to notify customers who purchased service steel wheels, where information is available, to return vehicles for lug nut replacement. There will be no charge to owners for this service.

Mailing of owner notification letters will occur the week of January 24, 2012. Notification to dealers will occur on December 6, 2011.

Ford's general reimbursement plan for the cost of remedies paid for by vehicle owners prior to notification of a safety recall was provided to the agency on February 24, 2011.

573.6 (c) (10) - Press statement and Dealer/Owner Letters

National media attention is likely as with most Ford recalls when posted to NHTSA's [safercar.gov](http://www.safercar.gov) website. Ford will provide public comments when requested. A news release will not be issued. A copy of the notification letters to dealers and owners from Ford will be forwarded to the agency when available.

573.6 (c) (11) - Recall Number

Ford has assigned recall number 11S23 to this action.

573.13 (c) (2) - Ending date for reimbursement Eligibility

The ending date for reimbursement eligibility for cost of remedies paid for by vehicle owners per Ford's general reimbursement plan is February 7, 2012.

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