Investigation: RQ 16-001
Date Opened: 09/28/2016
Investigator: Michael Lee
Approver: Michael Brown
Reviewer: Michael Lee
Subject: Brake Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Ford Motor Company
Products: 2015-2016 Ford F-150
Population: 282,000 (Estimated)

Problem Description: Consumers report sudden loss of brake effectiveness, with some specifically reporting a failure of the brake master cylinder and low brake fluid level.

FAILURE REPORT SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>ODI</th>
<th>Manufacturer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complaints:</td>
<td>25</td>
<td>TBDM</td>
<td>TBDM</td>
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<tr>
<td>Crashes/Fires:</td>
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<tr>
<td>Injury Incidents:</td>
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<tr>
<td>Number of Injuries:</td>
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<td>TBDM</td>
<td>TBDM</td>
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<td>Fatality Incidents:</td>
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<tr>
<td>Number of Fatalities</td>
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<td>TBDM</td>
<td>TBDM</td>
</tr>
</tbody>
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ACTION / SUMMARY INFORMATION

Action: A Recall Query has been opened.

Summary:
In May 2016, Ford Motor Company issued a safety recall (16V-345) to address loss of the front brakes in certain model year (MY) 2013 and 2014 Ford F-150 pickup trucks with 3.5L engines (covering those built from August 2013 to August 2014). Ford reported the problem was caused by the loss of brake fluid from the brake master cylinder reservoir into the brake booster, which can lead to visual and audible warnings of low brake fluid level to the operator. This recall was influenced by the Office of Defects Investigation's (ODI) Preliminary Evaluation, PE16-003, that was closed in July 2016. Now ODI has received 25 complaints alleging sudden loss of brakes in MY 2015 and 2016 Ford F-150 trucks equipped with 3.5L engines.

There appears to be a difference in the reported symptoms between the complaints on the MY 2015 vehicles (10 reports) and those on the MY 2016 vehicles (15 reports). The MY 2015 complaints allege symptoms of brake pedal going to the floor with sudden and complete loss of brake effectiveness, brake warning lamp illumination, and/or low or empty brake fluid level, which are consistent with the symptoms associated with the aforementioned recall, while the MY 2016 complaints allege a sudden and complete loss of brakes without the brake warning lamp illumination and low brake fluid level. However, some of the MY 2016 complaints allege that repair facilities diagnosed the problem as a failure of the master cylinder.

A Recall Query has been opened to assess the scope, frequency and safety-related consequences of the alleged defect in the subject vehicles.

The ODI complaints cited above can be viewed at www.safercar.gov under the following ODI identification numbers: 10734951, 10839988, 10862418, 10872737, 10873438, 10876359, 10881590, 10883442, 10885352, 10888026, 10888524, 10891826, 10891829, 10891886, 10893632, 10894688, 10894844, 10896122, 10896446, 10898079,
10899093, 10899198, 10902944, 10903776 and 10904695.