



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 19-011
Date Opened: 09/16/2019
Investigator: Robert Caple
Approver: Stephen Ridella
Subject: Seat Belt Retraction
Date Closed: 05/03/2021
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Chrysler (FCA US, LLC)
Products: Certain MY 2014-2015 Jeep Grand Cherokee and Dodge Durango
Population: 532,439
Problem Description: The upper front seat belt plastic guide (i.e, the front seat B-pillar mounted D-Ring) cracks during routine use, preventing proper retraction of the seat belt. The seat belt remains slack on an occupant resulting in improper fit.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	78	285	356**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	1,431	1,431

***Description of Other:** FCA warranty claims (unique VINs filtered for problem codes likely related to the defect condition) for front seat belts in certain MY 2014 and 2015 Grand Cherokee produced from mid-June 2013 through September 2014 which may relate to the alleged defect.

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: Close this Preliminary Evaluation.

Summary:

The Office of Defects Investigation (ODI) opened this Preliminary Evaluation to investigate complaints alleging improper retraction of the front seat belts (driver or passenger) due to the plastic guide of the D-ring cracking in model year (MY) 2014 Jeep Grand Cherokee vehicles. The purpose of the investigation was to understand the scope, frequency and safety related consequence of the alleged defect.

The subject condition occurs when the plastic material encapsulating the metal substructure of the front seat belt, B-pillar mounted D-ring cracks. The structural integrity of the D-ring remains intact; however, cracking of the plastic material pinches the webbing at the D-ring, thereby preventing it from properly retracting, and leaving the belt loose on the occupant. In addition to the detectability of the loose belt, the cracks in the plastic guide are also apparent by visual inspection, and many reports indicate the webbing can be manually fed back into the B-pillar/retractor to improve seat belt fit. ODI review of the available data has not identified any injuries attributable to this failure.

In its November 6, 2019 response to ODI's September 8, 2019 information request letter, which was scoped to include MY 2013 to 2015 Grand Cherokee and Dodge Durango vehicles, FCA provided information (portions of which were submitted with a request for confidentiality) detailing several material and process changes involved in the production of the subject D-ring. Based on these changes, FCA sub-divided certain production periods into population groups representing different design levels of the D-ring. FCA's response also confirmed the same D-rings were used in

Dodge Durango front seat belts. ODI notes that installation of seat belts during vehicle production involves highly controlled processes, in comparison to field service, which ensures all mechanical and electrical connections are properly secured.

ODI analyzed complaints submitted directly to the agency and complaint data received from FCA. During this review, ODI identified elevated failure rates for Grand Cherokee and Durango vehicles produced from mid-June 2013 through July 2015 when compared to vehicles produced both prior to and after this period. Additionally, review of FCA warranty data indicated a similar pattern of elevated warranty claims in the suspect July 2013-July 2015 period.

The primary factors for the failure rate differences appear to be a D-ring material change (from nylon to a Celcon plastic) starting in mid-June 2013 and a subsequent change (to a Delrin material) in August 2015, however other production changes occurred during the suspect period, as discussed in greater detail in FCA's November 2019 response. ODI's analysis of the various data sources showed vehicles produced in the suspect period experienced failure rates approximately 2 to 4 times higher, depending on the data source and production period evaluated. However the analysis also indicated a declining failure trend.

Given the detectability of the condition, the failure frequency combined with a currently declining failure trend, and lack of injuries attributable to this condition despite significant time in service, ODI is closing this Preliminary Evaluation without further action. The closing of the investigation does not constitute a finding by NHTSA that a defect does not exist, and NHTSA will take further action if warranted by future circumstances.

In the course of the investigation, FCA has informed the agency of its intention to offer an extended warranty for Grand Cherokee and Durango vehicles built during the suspect period. See the PE19-011 document repository at NHTSA.gov for further information on this program.

The ODI reports cited above can be viewed at NHTSA.gov under the reference numbers on the attached page.

The ODI reports associated with the closing of investigation PE19-011 are: 10876816, 11047976, 11051433, 11052841, 11056241, 11066026, 11066992, 11073598, 11075151, 11083093, 11088579, 11098608, 11100698, 11115861, 11122068, 11153175, 11162456, 11163536, 11181590, 11186102, 11207016, 11208477, 11228347, 11229887, 11232073, 11242818, 11244714, 11258049, 11268432, 11278730, 11279863, 11286756, 11287553, 11287713, 11288336, 11297066, 11297958, 11298936, 11300521, 11302310, 11309373, 11317763, 11319119, 11320608, 11321264, 11321409, 11323662, 11323864, 11325668, 11328000, 11328849, 11329043, 11331212, 11337085, 11339332, 11348763, 11349891, 11351133, 11351082, 11354778, 11355010, 11360724, 11361736, 11364106, 11364359, 11364475, 11366879, 11373025, 11373448, 11374121, 11374647, 11375107, 11375155, 11377701, 11383268, 11383489, 11383927, 11386395