



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

ODI RESUME

Investigation: PE 21-021
Date Opened: 10/14/2021
Investigator: Daniel Pinero
Approver: Stephen Ridella
Subject: High pressure fuel pump failure
Date Closed: 04/14/2023
Reviewer: Bruce York-B

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: Chrysler (FCA US, LLC)
Products: 2019-2020 MY RAM 2500-5500
Population: 604,651
Problem Description: High pressure fuel pump failure leading to stall/loss of motive power.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
Complaints:	57	495	552**
Crashes/Fires:	0	0	0
Injury Incidents:	0	0	0
Fatality Incidents:	0	0	0
Other*:	0	6,401	6,401

*Description of Other: Manufacturer warranty claims and field reports

** Total eliminates duplicates received by ODI and manufacturer.

ACTION / SUMMARY INFORMATION

Action: This Preliminary Evaluation (PE21-021) has been upgraded to an Engineering Analysis. To date, this Preliminary Evaluation has resulted in six recalls (see summary).

Summary:

The Office of Defects Investigation (ODI) opened PE21-021 on October 14, 2021 to investigate allegations of stall/loss of motive power as a result of high pressure fuel pump failures in certain model year (MY) 2019-2020 RAM 2500, 3500, 4500, and 5500 heavy duty trucks equipped with 6.7L Cummins turbodiesel engines.

On November 12, 2021, FCA filed vehicle recall 21V-880 and equipment recall 21E-094 on the subject population, identifying an 'internally failed component' of the high pressure fuel pump equipped on the 6.7L Cummins Turbodiesel engine that introduced debris into the fuel system potentially causing fuel starvation and consequently an unexpected loss of motive power. Discussions with FCA identified the high pressure fuel pump equipped on these vehicles as the Bosch-supplied CP4. On December 16, 2021, Bosch filed recall 21E-101, stating the pump failure was a consequence of a manufacturer application-specific fuel system design. NHTSA subsequently identified recall 21V-586 involving loss of motive power due to failed CP4 fuel pumps on certain BMW vehicles.

As a result of having received multiple recalls related to a common component, from two separate vehicle manufacturers, NHTSA's focus shifted to determine if the related defect allegation was limited in scope to the recalled population. In early 2022, information request letters were sent to FCA and BMW to determine the root cause and consequentially identify the proper scope of potentially defective vehicles. After ODI received their information request response, FCA filed recalls 22V-406, 22E-048, 22V-767, and 22E-087. During review of information request response materials, NHTSA determined that sufficient information to identify a comprehensive recall population could not be produced by FCA or BMW. On March 17, 2023, this Preliminary Evaluation was upgraded to an Engineering Analysis (EA23-001), expanding the scope to include the Tier-one supplier and any manufacturer who equipped or installed

similar high pressure fuel pumps subject to the failures observed in the recall population.

The ODI reports cited above can be reviewed at:

<http://www-odi.nhtsa.dot.gov/owners/SearchNHTSAID>

using the following complaint identification numbers: 11351441, 11361603, 11361616, 11365300, 11365426, 11365858, 11366401, 11372337, 11373793, 11374797, 11376793, 11378173, 11384377, 11386063, 11387018, 11399710, 11402550, 11415339, 11418868, 11418870, 11427075, 11434276, 11436807, 11437226, 11437249, 11437273, 11437292, 11437294, 11437394, 11437399, 11437403, 11437405, 11437423, 11437528, 11437565, 11437579, 11437580, 11437590, 11437679, 11437744, 11437781, 11437842, 11437993, 11438006, 11438008, 11438121, 11438138, 11438155, 11438392, 11438629, 11439359, 11439879, 11440397, 11443030, 11448163, 11458918, 11460558