



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

# ODI RESUME

**Investigation:** PE 15-003  
**Date Opened:** 01/13/2015  
**Investigator:** Kareem Habib  
**Approver:** Stephen Ridella  
**Subject:** Engine compartment fire

**Date Closed:** 12/09/2015  
**Reviewer:** Jeff Quandt

## MANUFACTURER & PRODUCT INFORMATION

**Manufacturer:** Chrysler (FCA US LLC)  
**Products:** MY 2015 Jeep Cherokee  
**Population:** 216,858

**Problem Description:** A misrouted A/C combo line may fail from contact with the exhaust manifold heat shield, which may result in an engine compartment fire.

## FAILURE REPORT SUMMARY

	ODI	Manufacturer	Total
<b>Complaints:</b>	1	5	5**
<b>Crashes/Fires:</b>	1	5	5**
<b>Injury Incidents:</b>	0	0	0
<b>Fatality Incidents:</b>	0	0	0
<b>Other*:</b>	3	5	5**

\***Description of Other:** Reports of engine compartment fire of other or undetermined cause.

\*\* Total eliminates duplicates received by ODI and manufacturer.

## ACTION / SUMMARY INFORMATION

**Action:** This Preliminary Evaluation is closed. Recall 15V-676.

### Summary:

On October 15, 2015, Fiat Chrysler Automobiles, US LLC, (FCA), submitted a Defect Information Report (DIR) to NHTSA regarding an air-conditioning suction/discharge combo line routing condition that may result in engine compartment fire in approximately 75,574 model year (MY) 2015 Jeep Cherokee vehicles equipped with 2.4L engines and built from October 1, 2014 through June 18, 2015 (NHTSA Recall 15V-676, FCA Recall R57). According to FCA's DIR, a misrouted A/C combo line can be pinched and cut or thermally degraded by the exhaust manifold heat shield, potentially resulting in loss of air conditioning, smoke and/or fire from ignition of leaked A/C refrigerant oil onto a hot exhaust manifold. The recalled vehicles will be inspected for misrouted A/C combo lines and those found to be misrouted will be replaced. FCA estimates that one percent of the recalled population may be affected by the A/C combo line routing defect.

ODI's analysis of warranty data provided by FCA in response to the information request letter for PE15-003 identified a spike in claims related to the A/C combo line leakage in vehicles equipped with 2.4L engines built after October 1, 2014. FCA implemented its final process corrective action for the hose routing concern on June 18, 2015. The 113,034 MY 2015 Jeep Cherokee vehicles equipped with 3.2L engines have different A/C line routing configurations and are not affected by the A/C combo line routing defect. FCA provided a total of 220 warranty claims potentially related to the A/C combo line in vehicles equipped with 2.4L engines. Ninety-five percent of the claims (210) involved the 74,574 Jeep Cherokee 2.4L vehicles built during the recall period. Only 10 A/C combo line claims and no related fires were identified in the 28,250 Jeep Cherokee 2.4L vehicles that were built before or after the period with the hose routing concern.

Analysis of engine compartment fires reported to ODI and FCA identified a total of 10 fires in MY 2015 Jeep Cherokee vehicles. Nine (9) of the fires involved vehicles equipped with 2.4L engines and 8 of these involved vehicles built during the production range subject to Recall 15V-676. These include 5 fires that FCA's investigations determined were most likely caused by the A/C combo line and 3 fires of unknown cause originating in the area of the exhaust manifold heat shield, resulting in fire incident rates in the recall population of 6.6 per 100,000 vehicles for the A/C combo line condition and 10.6 per 100,000 vehicles for fire incidents for which the A/C combo line could not be excluded as the cause. The other 2 engine compartment fires involved a low-mileage fire of unknown cause in a vehicle equipped with a 3.2L engine and a minor self-extinguished fire that FCA's investigation attributed to a lower transmission oil cooler (TOC) line connection seepage condition in a rental vehicle equipped with a 2.4L engine and built prior to the recall production range.

This preliminary evaluation is closed based on FCA's recall.

The following VOQ numbers are associated with the issues discussed in this closing resume:

A/C combo line failure: 10786287

Unknown cause: 10712350, 10678215, 10672201