OMB Control No.: 2127-0004

# **Part 573 Safety Recall Report**

# 14V-530

**Manufacturer Name :** Chrysler (FCA US LLC)

Submission Date: FEB 23, 2016 NHTSA Recall No.: 14V-530 Manufacturer Recall No.: P54



#### **Manufacturer Information:**

Manufacturer Name: Chrysler (FCA US LLC)

Address: 800 Chrysler Drive

CIMS 482-00-91 Auburn Hills MI 48326-2757

Company phone: 1-800-853-1403

## **Population:**

 $Number\ of\ potentially\ involved: 189,\!206$ 

Estimated percentage with defect: 0

### **Vehicle Information:**

Vehicle: 2011-2011 Jeep Grand Cherokee

Vehicle Type: LIGHT VEHICLES

Body Style : SUV Power Train : GAS

Descriptive Information: 2011 Jeep Grand Cherokee, 3.6L and 5.7L Engines

 $Production\ Dates: JAN\ 05,\ 2010\ -JUL\ 20,\ 2011$ 

### **VIN (Vehicle Identification Number) Range**

 $\begin: NR \\ \begin : NR \\ \begin : NR \\ \begin : NR$ 

Vehicle: 2011-2011 Dodge Durango Vehicle Type: LIGHT VEHICLES

Body Style : SUV Power Train : GAS

Descriptive Information: 2011 Dodge Durango, 3.6L and 5.7 Gasoline engines

Production Dates : JAN 05, 2010 - JUL 20, 2011

#### **VIN (Vehicle Identification Number) Range**

### **Description of Defect:**

Description of the Defect: Some Jeep Grand Cherokee and Dodge Durango vehicles may experience a failure in

the Fuel Pump relay within the Totally Integrated Power Module – 7 ("TIPM-7") which can result in a no start or stall condition. Root cause has been identified as deformation of contact spring due to the heat caused by contact power, ambient temperature around the fuel pump relay, and battery voltage. These factors,

present in combination and in high amounts lead to premature fuel pump relay

FMVSS 1:NR FMVSS 2:NR

Description of the Safety Risk: • The vehicle may intermittently or permanently: not start, not start the first

time, not stay running upon start, stall, or the fuel pump may stay energized upon vehicle shutdown. In the case of a stall event, the vehicle maintains power and functionality for certain features, such as hazard indicators, seat belt

pretensioners and airbags.

Description of the Cause: NR Identification of Any Warning that can Occur: NR

## **Supplier Identification:**

## **Component Manufacturer**

Name: Continental Automotive Systems, Inc.

Address: One Continental Drive

Auburn Hills 48326

Country: NR

### **Chronology:**

- •On October 1, 2013, an investigation was initiated after TIPM-7 parts went on national backorder.
- •In October of 2013, a preliminary review of field narratives and failed field vehicles appeared to indicate the fuel pump circuit in the TIPM-7 was not energizing the fuel pump.
- •On November 15, 2013, an analysis of ten WK fuel pump relays was completed during a tear down event. All ten of these relays showed contact spring deformation.
- •On November 20, 2013, analysis of a failed WK/WD fuel pump relay (not part of the 11/15/13 tear down) showed significant contact corrosion.
- •During December 2013 February 2014, cycle testing was conducted to analyze the effect of inductance and current at the fuel pump relay, and to attempt to recreate the TIPM-7 failure mode as seen in field returns of parts. This Cycle testing was unable to recreate TIPM-7 fuel pump relay failures.
- •In March April 2014, steady state load tests were conducted to analyze the effect of continuous high temperature and high current at the fuel pump relay, and to attempt to recreate the TIPM-7 failure mode as seen in field returns of parts. This steady state load testing was unable to recreate TIPM-7 fuel pump relay failures.
- •In May August 2014, multiple fuel pump relay versions were tested in "worst case" WK/WD vehicle operating conditions with a more severe duty cycle. Testing was able to successfully recreate TIPM-7 fuel pump relay failures in an accelerated time frame, as well as confirm the reliability of the external relay solution.
- •The scope has been determined based on field data inputs and engineering analysis to be all 2011 3.6L and 5.7L WK and WD vehicles.
- •As of August 25, 2014, Chrysler is unaware of any accidents or injuries potentially related to this issue.
- •On August 26, 2014, Chrysler determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall.

# **Description of Remedy:**

Description of Remedy Program: Chrysler will conduct a voluntary safety recall to install a new, more robust

fuel pump relay, which will be installed external to the TIPM-7.

How Remedy Component Differs from Recalled Component: NR

Identify How/When Recall Condition was Corrected in Production: NR

#### **Recall Schedule:**

Description of Recall Schedule: FCA US LLC notified dealers on December 12, 2014. The owner notification mailing began on December 19, 2014 and finished on December 19, 2014.

Planned Dealer Notification Date : NR - NR

Planned Owner Notification Date: NR - NR

<sup>\*</sup> NR - Not Reported