

May 6, 2014

Ms. Nancy Lummen Lewis Associate Administrator for Enforcement National Highway Traffic Safety Administration Recall Management Division (NVS-215) Room: W48-302 1200 New Jersey Ave. SE Washington, DC 20590

Dear Ms. Lewis:

The following information is submitted pursuant to the requirements of 49 CFR Part 573.6, Defect and Noncompliance Reports, which contains details of a safety defect in vehicles as determined by Chrysler Group LLC.

#### 573.6(c)(1): Manufacturer's Name, Brand Name

Chrysler Group LLC, Chrysler and Dodge

#### 573.6(c)(2)(i): Identification of Affected Vehicles

Make(s)	Model(s)	Model Year(s)	Inclusive Dates of Manufacture
Chrysler	Town and Country	2010 - 2014	August 25, 2010 to October 31, 2013
Dodge	Grand Caravan	2010-2014	August 25, 2010 to October 31, 2013

The determination of the recall population is described in Section 573.6(c)(6).

573.6(c)(2)(iv): Component manufacturer name, address, telephone number, and country of origin: KOSTAL North America 350 Stephenson Highway Troy, MI 48083 Country of Origin: Mexico (248) 284 – 6250

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## 573.6(c)(3): Potentially Affected Vehicle Population

644,850 (estimated)

### 573.6(c)(4): Percentage of Affected Vehicles

Unknown

## 573.6(c)(5): Description of Defect or Noncompliance

Some Chrysler Town and Country and Dodge Grand Caravan vehicles may experience an overheating vent window switch, located within the driver's door armrest, which may result in a burning odor, visible smoke or potential fire. Root cause was determined to be if a specific amount of syrupy liquid was introduced into the switch, accumulated, and the exact resistive value was reached between the power and ground contacts of the switch circuit board, a heating of the switch was possible.

# 573.6(c)(6): Chronology of Principal Events Leading to Determination of a Safety Defect

- In early October 2012, Chrysler Regulatory Affairs identified six 2010 MY Chrysler Minivans (Chrysler Town and Country and Dodge Grand Caravan) vehicles and one 2011 MY Minivan vehicle with melted vent switches, all had been replaced under warranty. The Quality Engineering Center confirmed an eighth switch from a 2011 MY Minivan vehicle had been returned to the supplier for analysis.
- On December 17, 2012, Chrysler received the Supplier analysis stating that a thermal event had occurred within the vent switch although a root cause could not be determined.
- On December 18, 2012 an investigation was opened on what is being defined as Gen 1 switch design.
- On March 26, 2013, analysis confirmed the presence of a resistive electrical short circuit between power and ground terminals on some test samples. Further analysis of why all samples did not exhibit the resistive short was requested.
- Testing did not replicate real world vehicle usage, so further root cause understanding was required.
- On June 21, 2013, Gen 2 design was authorized for 2014 MY Minivans to improve the current switch design by making it more robust. The design included the PCB to be sealed by a silicone mat.
- On September 3, 2013, a DFSS Blackbelt study was commissioned to understand root cause.

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- In early February, 2014, the Blackbelt study determined that if a specific amount of syrupy liquid was introduced into the switch, accumulated, and the exact resistive value was reached between the power and ground contacts of the switch circuit board, a heating of the switch was possible.
- On February 26, 2014, analysis of 36 inputs confirmed that the switches were all Gen 1 design level.
- On March 13, 2014, results of the Blackbelt study confirmed a repeatable way to generate overheats within Gen 1 switches. The same testing method did not produce a failure in a Gen 2 switch.
- In April, 2014, Chrysler inspected a vehicle fleet used to transport the disabled, after complaints of melted vent switches were reported. An inspection of 11 vehicles determined 5 had corrosion on the circuit board of the switch, however, no signs of damage were identified.
- It was also determined on this fleet that the switch was susceptible to water intrusion due to the operation mode of the vehicle. The driver's door was likely left open, allowing rain and snow from the roof to run off in the switch, while loading a wheelchair on the passenger side. The usage was determined to be unique from a retail customer.
- The suspect period was established as August 25, 2010 to October 31, 2013 at Windsor Assembly Plant.
- As of April 21, 2014, Chrysler identified approximately 36 CAIRs, 2 VOQs and 0 field reports potentially related to this issue.
- As of April 21, 2014, Chrysler is unaware of any accidents or injuries potentially related to this issue.
- On April 29, 2014, Chrysler determined, through the Vehicle Regulations Committee, to conduct a voluntary safety recall.

## 573.6(c)(8)(i): Description of Remedy

Chrysler will conduct a voluntary safety recall to replace the Gen 1 vent switch with a Gen 2 switch on all affected vehicles.

Chrysler has a longstanding policy and practice of reimbursing owners who have incurred the cost of repairing a problem that subsequently becomes the subject of a field action. To ensure consistency, Chrysler, as part of the owner letter, will request that customers send the original receipt and/or other adequate proof of payment to the company for confirmation of the expense.

## 573.6(c)(8)(ii): Dealer and Owner Communication

Chrysler estimates it will notify dealers and owners in June 2014.

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## 573.6(c)(10): Submission of Recall Communications

Chrysler will provide representative copies of the dealer and owner letters to NHTSA's Recall Management Division when available.

### 573.6(c)(11): Manufacturer's Campaign Number

Chrysler has assigned recall number P25 to this action.

Sincerely,

Kustin Kalog

Kristin J. Kolodge Product Investigations and Campaigns Senior Manager

cc: Frank Borris, NHTSA