

12V-527  
(4 pages)

November 7, 2012

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:

Attached is Chrysler Group LLC's ("Chrysler") Defect Information Report, complying with the requirements of 49 CFR Part 573, Defect and Noncompliance Reports, which contains details of a potential safety related defect in vehicles.

Chrysler Group will conduct a voluntary safety recall to install a jumper harness on all affected vehicles.

Sincerely,



David D. Dillon

Enclosure: Defect Information Report for Chrysler Group LLC. Recall M35

cc: Frank Borris, NHTSA

# DEFECT INFORMATION REPORT FOR CHRYSLER GROUP LLC

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**Submission Date:** November 7, 2012

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

Chrysler Group LLC, Jeep

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

Make(s)	Model(s)	Model Year(s)	Inclusive Dates of Manufacture
Jeep	Liberty (KJ)	2002-2003	January 9, 2001 – March 28, 2003
	Grand Cherokee (WJ)	2002-2004	February 13, 2001 – May 23, 2003

## **573.6(c)(2)(iv): Component manufacturer name, address, telephone number, and country of origin:**

TRW Automotive  
24175 Research Drive  
Farmington Hills, MI 48335-2642  
248-699-4655

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

744.822 (estimated)

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

< 0.03% (approximate)

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

Some vehicles may experience front airbag, side curtain airbag, and/or seatbelt pretensioner inadvertent deployments, increasing the risk for minor injuries and the possibility of a crash.

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

- In October of 2011, NHTSA opened an investigation (PE11-035) relating to complaints of inadvertent airbag deployments (IAD) in 2002-2003 KJ vehicles.
- In August of 2012, the NHTSA investigation was upgraded (EA12-001) to include other vehicles that utilized the same Application Specific Integrated Circuit (ASIC) as used in the KJ ORC module, including the 2002-2004 MY ZJ.

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- The investigation identified 126 IAD events that resulted in 59 minor injuries, involving 2002-2003 KJ vehicles with build dates ranging from June 6, 2001 to March 19, 2003.
- Moreover, 89 IAD events, that result in 22 minor injuries were identified involving 2002-2004 WJ vehicles with build dates ranging from August 1, 2001 to May 16, 2003.
- There were no crashes caused by an IAD event in KJ or WJ vehicles.
- KJ IAD events never result in a full driver airbag deployment, with almost 54% being Stage 2 (20%). WJ IAD events are full deployments of either the side curtain or the frontal airbags, but never both.
- A review of the field data indicated that the airbag warning lamp and/or chime are activated shortly before an IAD event. Inspections of ORC modules shows electrical overstress (EOS) to one of two squib ASICs.
- Equivalent Series Resistance (ESR) characterization of ORC modules has shown that modules from IAD vehicles exhibit ESR that is worse (higher) than modules outside of the suspect period.
- On October 3, 2012, the ORC supplier (TRW) informed Chrysler that the squib capacitor supplier (Kemet) made a material change, from Precious Metal Electrodes (PME) to Base Metal Electrodes (BME), which coincides with a noted change in capacitor ESR and corresponding IAD field performance.
- The capacitor supplier has confirmed that the use of PME for capacitors results in higher (worse) ESR ratings, which is believed to allow normal vehicle transients to damage the ORC module ASIC resulting in IADs.
- Chrysler was able to rule out other EA subject vehicles equipped with the same ASIC due to the ORC module electrical architecture, which would prevent an IAD. Chrysler continues to evaluate the architecture of and componentry used in the ZB ORC, which has no IAD events to date.
- On October 30, 2012, Chrysler Group LLC decided to conduct a voluntary safety recall of the affected vehicles.

### **573.6(c)(7): Information Used in Determination of a Noncompliance**

N/A

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

Chrysler will conduct a voluntary safety recall to install an in-line jumper harness with an integrated electrical noise filter, intended to perform the intended function of the ORC module capacitors.

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.

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### **573.6(e)(10): Dealer and Owner Communications**

Chrysler plans to begin notification of dealers and owners in January, 2013.  
Chrysler will provide the dealer and owner letters when available.

### **573.6(e)(11): Manufacturer's Campaign Number**

Chrysler has assigned recall number M35 to this action.