



RECEIVED
2009 APR -9 A 9:35
DEFECTS
1771

April 7, 2009

Mr. Daniel C. Smith
Associate Administrator for Enforcement
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
West Building, Fourth Floor
Washington, D.C. 20590



Dear Mr. Smith:

Attached is Chrysler LLC's ("Chrysler") Defect Information Report, complying with the requirements of 49 CFR Part 573, Defect and Noncompliance Reports, which contains details of an equipment related defect affecting some 2001 - 2004 model year Jeep Grand Cherokee vehicles equipped with heated seats. The front seat electric heater elements provided as a repair in Chrysler recall F17 for some 2003 -2004 model year Jeep Grand Cherokee vehicles, or provided as an aftermarket service part on some 2001 -2002 model year Jeep Grand Cherokee vehicles, may overheat and potentially cause a fire or result in injury under certain operating conditions.

Chrysler will conduct a voluntary equipment recall and notify owners of 2003 - 2004 model year Jeep Grand Cherokee vehicles who had recall F17 completed, and owners of 2001 - 2002 model year Jeep Grand Cherokee vehicles who had their front seat electric heater elements replaced in service, to contact their Chrysler dealer for replacement of the heated seat elements.

The owners of 2003 - 2004 Jeep Grand Cherokee vehicles included in Chrysler recall F17 that have not had the recall completed will be notified to bring their vehicle to a Chrysler dealership for completion of recall F17 using revised heated seat elements.

Sincerely,

A handwritten signature in cursive script that reads "Lawrence J. Sak".

Lawrence J. Sak

Enclosure: Defect Information Report for Chrysler Recall J14

cc: K.C. DeMeter, NHTSA
Division of Occupational Safety & Health
California Department of Industrial Relations

DEFECT INFORMATION REPORT FOR CHRYSLER LLC RECALL J14

Page 1

Submission date: April 7, 2009

Identifying classification of vehicles potentially affected:

Make	Model	Model Years	Inclusive Dates of Manufacture	Volume	Other
Jeep	Grand Cherokee	2001 - 2004	September 10, 2002 - June 30, 2004	102,354 (estimated)	with heated seats and with Chrysler recall F17 completed (03-04 MY) or seat heater element service replacement (01-02 MY)

Estimated percentage containing defect: unknown

Description of defect:

The front seat electric heater elements provided as a remedy for Chrysler recall F17 on some 2003 -2004 model year Jeep Grand Cherokee vehicles, or provided as an aftermarket service part on some 2001 -2002 model year Jeep Grand Cherokee vehicles, may overheat and potentially cause a fire or result in injury under certain operating conditions.

The name, address and telephone number of the suppliers who manufactured the subject components:

Johnson Controls, Inc. (complete front seat supplier)
5757 N. Green Bay Avenue
P.O. Box 591
Milwaukee, Wisconsin 53201
414-524-1200

EcoTemp Manufacturing Inc. (heater element supplier)
8400 Twins Oaks Drive
Windsor, ON N8N 5C2
519-739-1129

The following chronology of principal events led to the determination of a defect:

- In July of 2006, DaimlerChrysler Corporation ("DCC") issued safety recall F17 affecting some 2003-2004 model year Jeep Grand Cherokee vehicles based on incidents of fire due to overheating of the front seat heater element.
- DCC's defect information report submitted to NHTSA at that time stated that the root cause

DEFECT INFORMATION REPORT FOR CHRYSLER LLC RECALL J14

Page 2

of the overheating was that “the heated seat module was operating at a temperature above design intent.” Subsequent investigation revealed that the module was operating above the design intent because a change in the seat heater elements from resistance wire to carbon fiber was implemented without modifying the set points in the heated seat control module. The control module itself was operating within the specified parameters.

- The F17 recall remedy kit included new seat heater elements that provided temperature feedback to the heated seat control module to regulate the element temperature.
- This same seat heater element was also sold to owners of some 2001 – 2002 model year Jeep Grand Cherokee owners as an aftermarket service part.
- In December of 2006, a change was implemented to the recall kit to add reinforcing tape to the heated seat elements to improve robustness during handling and installation.
- Since that time, Chrysler has monitored field input and has subsequently become aware of customer complaints involving 184 unique 2003-2004 Jeep Grand Cherokee vehicles alleging that the recall repair F17 had failed. The vast majority of the complaints allege localized burn marks on the seat cushion or seat back. However, a small number appeared to result in open flames. Within these complaints there have also been a number of claims of injury or personal property damage.
- 144 of the 184 vehicles (78%) reported a failure of the original F17 recall kit. Data associated with these vehicles indicated an average of 527 days and 19,330 miles at the time of the incident. Analysis determined that failures of these kits were primarily related to installation errors resulting in creased or torn seat heater elements and subsequent fatigue cracking.
- The remaining 40 vehicles (22%) reported a failure of the revised kit implemented in December of 2006. Data associated with these vehicles indicated an average of 356 days and 13,795 miles at the time of the incident. Analysis determined that failures of these kits were primarily related to element fatigue cracking, which was exacerbated due to the development of stress risers created when the reinforcing tape was applied to the element.
- Investigation determined that a crack in the seat heater element surface can initiate during seat usage, and the crack can propagate until reaching the element bus bar, which carries electrical current during heated seat operation. If the crack propagates across the bus bar, the resulting resistance increase can result in localized hot spots and the potential for fire.
- These failure modes were duplicated utilizing a newly developed laboratory test procedure. A revised element design that addressed potential installation issues, coupled with modifications for prevention of element fatigue cracking, was developed and validated during the investigation.
- This data was presented to the Chrysler Vehicle Regulations Committee on March 31, 2009 who decided to conduct a voluntary equipment recall to replace the heated seat elements to repair the affected vehicles.

Statement of measures to be taken to correct defect:

Chrysler will conduct an equipment recall to replace the front seat heater elements on all affected vehicles. Chrysler will initiate national notification to both dealers and owners when a

DEFECT INFORMATION REPORT FOR CHRYSLER LLC RECALL J14

Page 3

sufficient quantity of parts is available. Chrysler's schedule for implementing this recall is not available at this time.

Chrysler has a long-standing 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 original receipt and/or other adequate proof of payment to the company for confirmation of the expense.