

# DAIMLERCHRYSLER

March 4, 2003

Mr. Kenneth N. Weinstein  
Associate Administrator, Safety Assurance  
National Highway Traffic Safety Administration  
400 Seventh Street, S.W.  
Washington, D.C. 20590

DaimlerChrysler Corporation

Stephan J. Speth

Director  
Vehicle Compliance & Safety Affairs

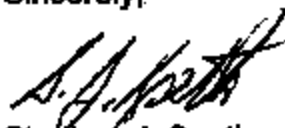
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OFFICE OF  
DEFECTS INVESTIGATION

03V-079 ① of ③

Dear Mr. Weinstein:

Attached is DaimlerChrysler Corporation's 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 some 2004 model year Jeep Grand Cherokee vehicles. The steering gear assembly may contain an improperly formed clip, which could dislodge and cause increased steering effort. DaimlerChrysler Corporation will conduct a voluntary safety recall to replace the steering gear. DaimlerChrysler is not aware of any accidents or injuries related to this condition.

Sincerely,



Stephen J. Speth

Enclosures: Defect Information Report for DaimlerChrysler Corporation Recall # C12  
Dealer Service Instructions for Safety Recall # C12  
Owner Letter for Safety Recall # C12

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

**DEFECT INFORMATION REPORT FOR DAIMLERCHRYSLER RECALL # C12**

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**Submission date:** March 4, 2003**Identifying classification of vehicles potentially affected:**

Make	Model	Model Year	Inclusive Dates of Manufacture	Vehicle Volume
Jeep	Grand Cherokee	2004	1/27/2003- 1/29/2003	286

The exact number of manufactured vehicles involved in this recall is 286.

The involved Vehicle Identification Number range is:

<u>Low</u>	<u>High</u>
4C100289	4C129239

(VIN last eight characters) - 4 = 2004 Model Year; C = Jefferson North Assembly Plant, Detroit, Michigan; and the last six digits = sequential number.

**We caution that the above range represents only the lowest and highest VIN sequential numbers included in the recall. This range cannot be used to determine conclusively that a vehicle is involved in the recall because most vehicles with a VIN within the range are not affected by the recall.**

**Estimated percentage containing defect:** 9%

**Description of defect:**

The Power Steering Gear in some vehicles may contain an improperly formed spacer clip, which could dislodge within the steering gear. A dislodged clip may cause increased steering effort.

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

Delphi Automotive Systems  
3900 Holland Road  
Saginaw, Michigan 48601  
(989) 757-5700

**The following chronology of principal events occurred between January 2003, and February 2003, and led to the determination of a defect:**

- The 2004 Jeep Grand Cherokee uses a recirculating ball power steering gear supplied by Delphi Steering Systems Saginaw Division. This steering gear contains a spacer clip to limit rack piston travel in the right turn direction, and is unique to the Jeep Grand Cherokee application.
- On January 24, 2003, Delphi found that improperly formed spacer clips were being assembled into Grand Cherokee steering gears.
- This condition was discovered during an in-system inspection at Delphi. When the steering gear is run through a "travel check" operation and the internal rack piston is

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at the full right turn position, it generates a significant load against the subject spacer clip. This load can flatten an improperly formed clip, bending the clip retaining tabs and potentially allowing the spacer clip to become dislodged. Steering Gears that failed the in-system travel check inspection were taken to the repair loop at Delphi.

- Cause of the improperly formed clip was traced to a damaged form die in the supplier's manufacturing process. Delphi did not initially believe any steering gear assemblies with a misformed spacer clip had been shipped to DaimlerChrysler.
- Delphi initiated a bench test of a suspect steering gear assembly with various spacer clip orientations to determine consequence. This testing indicated that a loose spacer clip would be pressed against the gear bulkhead during a full lock right turn and remain there. However, in the process of deforming the clip, a vehicle could experience increased steering effort.
- On January 31, 2003, Delphi notified DaimlerChrysler that a quantity of suspect steering gear assemblies had been shipped to the Jefferson North Assembly Plant (JNAP). The JNAP yard was immediately contained. Subsequent review by Vehicle Identification Number determined that some suspect vehicles had been shipped.
- To further evaluate consequence, a steering gear assembly with an intentionally malformed clip was installed into a Grand Cherokee and driven through a variety of normal and extreme vehicle maneuvers. The clip became dislodged following severe steering cycles, and similar to the earlier bench testing, it was found that the clip would stick to bulkhead at end of the gear housing and remain there. This condition did not result in any degradation of steering performance.
- 195 vehicles with the suspect clip had been contained at JNAP. The steering gears from these vehicles were disassembled and the spacer clips inspected. This inspection identified 18 spacer clips which were improperly formed, and 1 of those clips had become dislodged within the housing.
- This data was presented to the Vehicle Regulations Committee who decided to conduct a safety recall to repair affected vehicles.

**Statement of measures to be taken to correct defect:**

DaimlerChrysler Corporation will conduct a safety recall to replace steering gear assemblies on the affected vehicle population. DaimlerChrysler expects to initiate national notification to dealers March 5, 2003, and to owners on March 12, 2003.

DaimlerChrysler Corporation 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. Because of the warranty coverage on these new vehicles, it is unlikely that any owner would have incurred expense to repair this condition. However, to ensure consistency, DaimlerChrysler Corporation, 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.