# DAIMLERCHRYSLER

DaimlerChrysler Corporation
Stephan J. Speth
Director
Vehicle Compliance & Safety Affairs

February 1, 2005

Ms. Kathleen C. DeMeter, Director
Acting Associate Administrator, Safety Assurance
National Highway Traffic Safety Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

05V-034
(4 Pages)

Dear Ms. DeMeter:

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 2005 model year Dodge Durango vehicles. The fuel filler inlet check valve may not fully close at the end of refueling. DaimlerChrysler Corporation will conduct a voluntary safety recall to inspect for inlet check valves that do not fully close during refueling, and replace the fuel tank if necessary.

Sincerely,

Stephan J. Speth

Enclosures: Defect Information Report for DaimlerChrysler Corporation Recall E01

cc: Division of Occupational Safety & Health
California Department of Industrial Relations



DaimlerChrysler Corporation
800 Chrysler Drive CIMS 482-00-91
Auburn Hills MI USA 48326-2757

**DEFECT INFORMATION REPORT FOR DAIMLERCHRYSLER RECALL E01**


**Submission date:** February 1, 2005

**Identifying classification of vehicles potentially affected:**

| Make | Model | Model Year | Inclusive Dates of Manufacture | Vehicle Volume |
|---|---|---|---|---|
| Dodge | Durango | 2005 | 3/1/04 - 11/16/04 | 26,000 (estimated) |

**Estimated percentage containing defect:** 20%

**Description of defect:**

The fuel tank filler tube inlet check valve on some vehicles may not fully close at the end of refueling. This could allow some fuel to escape from the vehicle via the filler neck at the end of refueling. Fuel in the presence of an ignition source can result in a fire.

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

Inergy Automotive Systems, Inc.
2710 Bellingham Suite 400
Troy, Michigan 48083
(248) 743-5893

**The following chronology of principal events occurred between November, 2004 and January, 2005 and led to the determination of a defect:**

- 2005 model year Dodge Durango vehicles are equipped with an On-Board Refueling Vapor Recovery (ORVR) System. This system incorporates a plastic inlet check valve that is welded to the fuel tank and is designed to open while refueling and close when fuel delivery has ceased.
- In mid-November, 2004, DaimlerChrysler Corporation became aware of reports indicating that some 2005 model year Dodge Durango vehicles had exhibited fuel "spit-back" or "well-back" at the end of refueling when completely filling the tank.
- Vehicles at DaimlerChrysler Corporation's Newark Assembly Plant were subsequently inspected and none of the vehicles inspected exhibited the condition.
- Concurrently, the fuel tank supplier was advised of the reported condition and a review

of their tank assembly process was initiated.

- The supplier conducted a series of tests on approximately 1800 in-system assembled tanks to simulate the vehicle refueling process. None exhibited the condition.
- During the supplier's testing of completed tank assemblies in November, 2004, analysis indicated that some inlet check valves removed from assembled fuel tanks showed signs of slight distortion from localized excessive heat near the top of the valve base.
- Further investigation into the supplier's fuel tank assembly process determined that the inlet check valve gripper was not centering the valve in a repeatable manner prior to welding to the tank, which could result in some cases in one side of the valve being exposed to excessive heat. Evaluation showed that these valves were not distorted to the point of prohibiting proper valve operation.
- In late November, 2004, the supplier revised their assembly process to properly align the gripper unit, and began audits verifying that the finished product exhibited no signs of excessive heat exposure.
- During December, 2004, the supplier completed installation of revised heater platen designs that added additional robustness to the inlet check valve welding process during fuel tank assembly.
- In December, 2004, the supplier subsequently identified a process change that occurred at their manufacturing facility in early October, 2004, relating to the replacement of loose and worn gripper pins. It was established that this process change could have eliminated the potential for distortion of the valve assembly during fuel tank assembly.
- Analysis during December, 2004, and January, 2005, of components returned from vehicles exhibiting this condition indicated that the inlet check valve outer sleeve was distorted and did not allow the valve to slide freely into the closed position. This distortion was consistent with the application of excessive heat.
- Investigation showed that if the inlet check valve does not fully close at the completion of refueling, pressure differences between the fuel tank and the atmosphere may cause some fuel to exit the fuel fill tube, thus creating the "well-back" condition at the completion of refueling. Further analysis indicated that all fuel tank assemblies from vehicles reporting this condition had been produced at the supplier on or before October 1, 2004.
- A survey of 2005 model year Dodge Durango vehicles with fuel tank assemblies produced prior to October 1, 2004 was completed during November and December, 2004, and resulted in 20 vehicles of 102 total vehicles surveyed exhibiting performance consistent with this condition (20%).
- There are no reports of injury or fire attributable to this condition.
- This data was presented on January 25, 2005 to the Vehicle Regulations Committee who decided to conduct a safety recall to inspect and repair the affected vehicles.

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

DaimlerChrysler Corporation will inspect the fuel filler inlet check valve on the affected vehicles. Vehicles found to have a suspect inlet check valve will have the fuel tank assembly replaced. DaimlerChrysler Corporation expects to initiate national notification to both dealers and to owners when specific tools to cycle the valve have been designed and produced and an adequate supply of fuel tanks is available. DaimlerChrysler Corporation's scheduling information for implementing this recall is not available at this time.

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. 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.