

August 13, 2013

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, Fiat

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

Make(s)	Model(s)	Model Year(s)	Inclusive Dates of Manufacture
Fiat	500e	2013	December 16, 2012 to
			August 13, 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:

N/A

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

TBD

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

100% (estimated)

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

Some Fiat 500e Battery Electric Vehicles (BEV) may experience loosening of the fasteners attaching the half shaft inboard constant velocity joint to the gearbox output flange, resulting in noise and a loss of drive capability. Due to the product, process and rework anomalies, the half shaft joints on the suspect vehicles may not be as engineered and developed for this application.

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

- On August 2, 2013, Chrysler opened an investigation as a result of one vehicle experiencing loosening of the half shaft fasteners and loss of drive capability.
- The investigation found that 156 vehicles had been subjected to a repair procedure to replace the powertrain motor and gearbox performed between July 8, 2013 and July 29, 2013. The investigation further found that during reassembly, the original half shaft fasteners were reused.
- The investigation established that the half shaft fasteners contain a chemical thread lock material ("Lock Patch") that prohibits reuse of the fasteners.
- Between August 2 and August 9, 2013, Chrysler identified six vehicles from the rework population experiencing loosening of the half shaft fasteners.
- On August 9, two additional vehicles were identified with partially loosened half shaft fasteners. These two additional vehicles were outside the population of 156 reworked vehicles.
- Further investigation found that the Tier 2 fastener supplier is using a different Lock Patch
  material than was expected (based on initial joint development). In plant Lock Patch
  material was inspected by Sante Fe Fastener Engineering and found to be contaminated
  by grease. A yard audit of six vehicles at the assembly plant found a majority of half shaft
  fasteners below the minimum audit torque specification.
- Additionally, the investigation found that the assembly plant is using a pulse tool to torque the fasteners. Pulse tools are not permitted on fasteners with a lock patch, as they can compromise the integrity of the lock patch.
- Chrysler is not aware of any CAIRs, VOQs or field reports related to this issue.
- Chrysler is not aware of any accidents or injuries related to this issue.
- On August 9, 2013, Chrysler decided through the Vehicle Regulations Committee to conduct a voluntary safety recall.

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

N/A

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

Chrysler will conduct a voluntary safety recall to replace the fasteners attaching the half shaft inboard joint 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 plans to begin notification of dealers and owners in August 2013. Chrysler will provide the dealer and owner letters when available.

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

Chrysler will provide the dealer and owner letters when available.

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

Chrysler has assigned recall number N51 to this action.

Sincerely,

Kristin J. Kolodge

cc: Frank Borris, NHTSA

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