

*Free*  
3/8/07



GM Reply Date: March 5, 2007

**GM671C Supplement 2** Book 1 of 1

NHTSA # EA05-017 NHTSA #2

**Non-Confidential**

**Subject Vehicle:** All 2003 - 2006 Model Year Hummer H2 vehicles manufactured for sale or lease in the United States.

**Alleged Defect:** Steering knuckle crack and/or fracture at the lower ball joint stud hole on a subject vehicle, which occurs for any reason, including but not limited to, a ball joint failure, tie rod failure, and/or idler arm.

- Tab (1).....GM Response Letter to NHTSA
- Tab (2).....Supplier Confidentiality Letter
- Tab (3).....Attachment 1 **DOES NOT EXIST**
- Tab (4).....Attachment 2 **DOES NOT EXIST**
- Tab (5)..... Attachment 3 Supplier Material (1) CD
- Tab (6)..... Attachment 4 Supplier Confidentiality Material (1) CD



March 5, 2007

Kathleen C. DeMeter, Director  
Office of Defects Investigation  
NHTSA Enforcement  
Room #5326  
400 Seventh Street, S.W.  
Washington, D.C. 20590

GM-671C Supplement 2

EA05-017  
NVS-214pk

Dear Ms. DeMeter:

This letter is a supplemental response for the subject investigation. General Motors has recently discovered new information that relates to a previously identified supplier of service parts, namely Automotive Corporation. GM is providing information in response to the following IR questions.

In addition to Eagle Picher, Delphi contracted Automotive Corporation as an alternate steering knuckle machining supplier to fulfill the demands for production of both GMT800 and H2 vehicles.

The steering knuckles machined by Automotive Corporation and the steering knuckles machined by Eagle Picher were used interchangeably in the front brake corners supplied by Delphi for use on either GMT800 and H2 vehicles.

**GM671 / PE04-080; February 28, 2005:**

**Q9. Describe all assessments, analyses, tests, test results, studies, surveys, simulations, investigations, inquiries and/or evaluations (collectively, "actions") that relate to, or may relate to, the alleged defect in the subject vehicles that have been conducted, are being conducted, are planned, or are being planned by, or for, GM. For each such action, provide the following information:**

- a. **Action title or identifier;**
- b. **The actual or planned start date;**
- c. **The actual or expected end date;**
- d. **Brief summary of the subject and objective of the action;**
- e. **Engineering group(s)/supplier(s) responsible for designing and for conducting the action; and,**
- f. **A brief summary of the findings and/or conclusions resulting from the action.**

**For each action identified, provide copies of all documents related to the action, regardless of whether the documents are in interim, draft, or final form. Organize the documents chronologically by action.**

**Action 9.1S:** Manufacturing operation and quality control documents

**Start Date:** December 13, 2001

**End Date:** March 5, 2007

**Engineering Group:** Delphi and Automotive Corporation

**Objective:** Establish machining and quality control process.

**Summary of Action:** Steering knuckles machined to specifications.

See ATT\_3\_SPLR disc in folder "GM671C\_Supp2\_Q9" for the documents stated in the action.

See ATT\_4\_SPLR\_CONF disc in the folder labeled "GM671C\_Supp2\_Q9\_Conf" for the documents stated in the action. Supplier Automotive Corporation requests that this information, which has been stamped "Confidential" be afforded confidential treatment by NHTSA.

**GM671 / PE04-080; February 28, 2005:**

**Q15. State the number of subject components that GM has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable).**

**For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also, identify by make, model and model year, any other vehicles of which GM is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.**

GM has identified and provided Automotive Corporation as a service part source supplier in the response to GM671A EA05-017, March 31, 2006 response for question 29.

Automotive Corporation shipped Delphi 94,494 production knuckles for use on either GMT800 or H2 vehicles from approximately August 2002 through May 2003. See ATT\_3\_SPLR in folder "GM671C\_Supp2\_Q15\_Shipments."

**GM671A / EA05-017; March 31, 2006:**

**Q29. State the number of subject components and steering knuckles that GM has sold that may be used in the subject vehicles by component name, part number (both service and engineering/production), model and model year of the vehicle in which it is used and month/year of sale (including the cut-off date for sales, if applicable):**

- a. Subject components and steering knuckles; and
- b. Any kits that have been released, or developed, by GM for use in service repairs to the subject component/assembly.

**For each subject component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number). Also identify by make, model and model year, any other vehicles of which GM is aware that contain the identical component, whether installed in production or in service, and state the applicable dates of production or service usage.**

Please see response to question Q15 above.

**GM671B / EA05-017; October 25, 2006 response**

**Q6. Provide detailed records from Grede, Eagle-Pitcher, Delphi, and GM on all non-conforming knuckles for the 2003 MY Hummer H2. Non-conforming refers to parts not meeting required specifications. This would include, but not necessarily be limited to, items such as the following:**

- a) **Financial charges to any supplier from any of the supplied parties for non-conformance;**
  - b) **Shipment records indicating return of non-conforming knuckles; and**
  - c) **Quality Tracking records such as Problem Reporting and Resolution (PRR) documents and/or problem Resolution Tracking System (PRTS) or similar mechanism or procedure by which the nature of the non-conformance is documented, analyzed and/or resolved.**
- 
- a) Automotive Corporation has no financial records that relate to non-conforming knuckles.
  - b) Delphi has no shipment records to Automotive Corporation indicating return of non-conforming knuckles.
  - c) GM has issued no PR&R documents to its suppliers for this issue. Automotive Corporation has issued no PRTS documents for this issue.

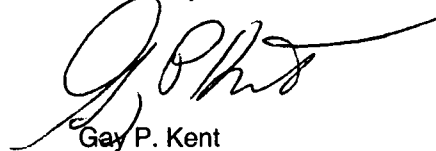
**GM671B / EA05-017; October 25, 2006:**

**Q7. Describe the procedure and criteria for checking the surface finish and taper on the lower ball joint stud holes machined in the steering knuckles on the subject vehicles. Provide hard copies of the Job Instruction and Job Element Sheet (JES).**

Please see response to question Q9.

Please contact me if you require further information about this response or the nature or scope of our searches.

Sincerely,



Gay P. Kent  
Director

Product Investigations

Attachments

**GM671C SUPPLEMENT 2  
EA05-017**

**SUPPLIER CONFIDENTIAL LETTER**

**SUPPLIER CONFIDENTIAL LETTER  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF COUNSEL**

**GM671C SUPPLEMENT 2**  
**EA05-017**

**ATTACHMENT "1"**

**DOES NOT EXIST**

**GM671C SUPPLEMENT 2**  
**EA05-017**

**ATTACHMENT "2"**

**DOES NOT EXIST**

**GM671C SUPPLEMENT 2**  
**EA05-017**

**ATTACHMENT "3"**  
**SUPPLIER MATERIAL**



**GM671C SUPPLEMENT 2  
EA05-017**

**ATTACHMENT "4"**

**SUPPLIER CONFIDENTIAL MATERIAL**

**SUPPLIER CONFIDENTIAL MATERIAL  
HAS BEEN REMOVED FROM THIS  
ATTACHMENT AND SUPPLIED TO  
THE OFFICE OF THE CHIEF COUNSEL**