



U.S. Department  
of Transportation

**National Highway  
Traffic Safety  
Administration**

1200 New Jersey Avenue SE.  
Washington, DC 20590

DEC 20 2013

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

Mr. Bob Hall, Quality Control Manager  
A-1 Auto Electric  
2320 Stanislaus Street  
Fresno, CA 93721

NVS-214kmb  
PE13-038

Dear Mr. Hall:

This letter is to inform you that the Office of Defects Investigation (ODI) of the National Highway Traffic Safety Administration (NHTSA) has opened a Preliminary Evaluation (PE13-038) to investigate an allegation of mounting bracket fracture resulting in an unsecured compressed natural gas (CNG) fuel container in a model year (MY) 2012 Ford F-550 vehicle with a CNG fuel system conversion performed fully or in part by A-1 Auto Electric / A-1 Alternative Fuel Systems (A-1), and to request certain information.

On August 7, 2013, ODI received a complaint (NHTSA Reference Number: 10534095) from a fleet representative indicating a concern with the CNG fuel container mounting brackets on a 2012 Ford F-550 based 30-passenger transit bus equipped with a CNG fuel system conversion developed by BAF Technologies, Inc. (BAF), a subsidiary of Westport Innovations Inc. (Westport). According to the complainant, the subject vehicle was purchased new from A-Z Bus Sales, Inc. with the CNG fuel system already installed. BAF reportedly supplied only the low-pressure / engine compartment portion of the CNG fuel system conversion to A-1, and it was A-1 who reportedly developed and installed the high-pressure portion of the fuel system including the CNG fuel container(s) and the subject mounting brackets.

The subject complaint alleged that a mounting bracket that normally secures the right side CNG fuel container to the outboard side of the frame rail fractured at or near the weld area, allowing the fuel container to drop to the pavement. The driver reportedly observed sparks in both side view mirrors as the fuel container was being dragged along the pavement underneath the vehicle. As the driver attempted to pull the vehicle over to the shoulder of the roadway, the fuel container reportedly slid over to the left side of the vehicle and became wedged in front of the left rear tires, bringing the vehicle to an abrupt stop with the rear of the vehicle still partially blocking the right hand lane of a 2 lane highway. According to the complainant, the subject fuel container only remained attached to the vehicle via the two flexible fuel hoses. At the time of this incident, the subject bus had 64,632 miles on the odometer and approximately one year in service.

The complainant represents a fleet that operates over 100 buses, 60 of which are equipped with CNG fuel systems. Of these, six buses were equipped with CNG fuel systems developed and installed by BAF / A-1. Four of the six buses with the BAF / A-1 fuel systems were subsequently modified by another company with additional CNG fuel containers for longer range operation and revised mounting brackets. The subject incident vehicle is one of the two buses that retained the original A-1 installed fuel container brackets. Upon further inspection, the complainant reportedly identified solenoid valve electrical wiring that had made contact with another CNG fuel container on the subject incident vehicle. This allegedly caused Level 3 damage to the fuel container. In addition, the complainant reportedly observed partial mounting bracket fracture on the second bus that retained the original A-1 installed fuel container brackets. A copy of the subject report is enclosed for your information.

Unless otherwise stated in the text, the following definitions apply to these information requests:

- **Subject vehicles:** any and/or all natural gas vehicles (NGVs) manufactured for sale or lease in the United States, altered or modified by A-1 with the subject components.
- **Subject component(s):** any and/or all CNG fuel container mounting brackets that are the same or substantially similar to those used as original equipment on the subject incident vehicle identified in the attached complaint.
- **Altered vehicle:** a completed vehicle previously certified in accordance with 49 CFR § 567.4 or 49 CFR § 567.5 that has been altered other than by the addition, substitution, or removal of readily attachable components, such as mirrors or tire and rim assemblies, or by minor finishing operations such as painting, before the first purchase of the vehicle other than for resale, in such a manner as may affect the conformity of the vehicle with one or more Federal Motor Vehicle Safety Standard(s) or the validity of the vehicle's stated weight ratings or vehicle type classification.
- **Alterer:** any person who alters by addition, substitution, or removal of components (other than readily attachable components) a certified vehicle before the first purchase of the vehicle other than for resale.
- **Completed vehicle:** a vehicle that requires no further manufacturing operations to perform its intended function.
- **Dealer:** any person who is engaged in the sale and distribution of new motor vehicles or items of motor vehicle equipment primarily to purchasers who in good faith purchase any such vehicles or item of equipment for purposes other than resale.
- **Distributor:** any person who is engaged in the sale and distribution of motor vehicles or items of motor vehicle equipment for resale.
- **Final-stage manufacturer:** any person who performs such manufacturing operations on an incomplete vehicle that it becomes a completed vehicle.

- **Incomplete vehicle**: an assemblage consisting, at a minimum, of chassis (including the frame) structure, power train, steering system, suspension system, and braking system, in the state that those systems are to be part of the completed vehicle, but requires further manufacturing operations to become a completed vehicle.
- **Incomplete vehicle manufacturer**: any person who manufactures an incomplete vehicle by assembling components none of which, taken separately, constitute an incomplete vehicle.
- **Intermediate manufacturer**: any person, other than the incomplete vehicle manufacturer or the final-stage manufacturer, who performs manufacturing operations on a vehicle manufactured in two or more stages.
- **Manufacturer**: any person engaged in the manufacturing or assembling of motor vehicles or motor vehicle equipment, including any person importing motor vehicles or items of motor vehicle equipment for resale.
- **Modifier**: see motor vehicle repair business.
- **Motor vehicle**: any vehicle driven or drawn by mechanical power and manufactured primarily for use on the public streets, roads, and highways, except any vehicle operated exclusively on a rail or rails.
- **Motor vehicle equipment**: any system, part, or component of a motor vehicle as originally manufactured or any similar part or component manufactured or sold for replacement or improvement of such system, part, or component or as any accessory or addition to the motor vehicle, and any device, article, or apparel not a system, part, or component of a motor vehicle (other than medicines, or eyeglasses prescribed by a physician or other duly licensed practitioner), which is manufactured or sold, delivered, offered, or intended for use exclusively to safeguard motor vehicles, drivers, passengers, and other highway users from risks of accidents, injury, or death.
- **Motor vehicle repair business**: any person holding itself out to the public to repair for compensation a motor vehicle or motor vehicle equipment. This term includes businesses that service vehicles without malfunctioning or broken parts or systems by adding features or components to or otherwise customizing those vehicles.
- **Original equipment**: an item of motor vehicle equipment (including a tire) which was installed in or on a motor vehicle at the time of its delivery to the first purchaser.
- **Replacement equipment**: an item of motor vehicle equipment (including a tire) other than original equipment.
- **A-1**: A-1 Auto Electric / A-1 Alternative Fuel Systems, all of their past and present officers and employees, whether assigned to their principal offices or any of their field or other locations, including all of their divisions, subsidiaries (whether or not incorporated)

and affiliated enterprises and all of their headquarters, regional, zone and other offices and their employees, and all agents, contractors, consultants, attorneys and law firms and other persons engaged directly or indirectly (e.g., employee of a consultant) by or under the control of A-1 (including all business units and persons previously referred to), who are or, in or after January 1, 2010, were involved in any way with any of the following related to the alleged defect in the subject vehicles:

- a. Design, engineering, analysis, modification or production (e.g. quality control);
  - b. Testing, assessment or evaluation;
  - c. Consideration, or recognition of potential or actual defects, reporting, record-keeping and information management, (e.g., complaints, field reports, warranty information, part sales), analysis, claims, or lawsuits; or
  - d. Communication to, from or intended for zone representatives, fleets, dealers, or other field locations, including but not limited to people who have the capacity to obtain information from dealers.
- **Alleged defect:** mounting bracket fracture resulting in a partially secured or unsecured CNG fuel container and/or solenoid valve electrical wiring making contact with a CNG fuel container.
  - **Document:** "Document(s)" is used in the broadest sense of the word and shall mean all original written, printed, typed, recorded, or graphic matter whatsoever, however produced or reproduced, of every kind, nature, and description, and all non-identical copies of both sides thereof, including, but not limited to, papers, letters, memoranda, correspondence, communications, electronic mail (e-mail) messages (existing in hard copy and/or in electronic storage), faxes, mailgrams, telegrams, cables, telex messages, notes, annotations, working papers, drafts, minutes, records, audio and video recordings, data, databases, other information bases, summaries, charts, tables, graphics, other visual displays, photographs, statements, interviews, opinions, reports, newspaper articles, studies, analyses, evaluations, interpretations, contracts, agreements, jottings, agendas, bulletins, notices, announcements, instructions, blueprints, drawings, as-builts, changes, manuals, publications, work schedules, journals, statistical data, desk, portable and computer calendars, appointment books, diaries, travel reports, lists, tabulations, computer printouts, data processing program libraries, data processing inputs and outputs, microfilms, microfiches, statements for services, resolutions, financial statements, governmental records, business records, personnel records, work orders, pleadings, discovery in any form, affidavits, motions, responses to discovery, all transcripts, administrative filings and all mechanical, magnetic, photographic and electronic records or recordings of any kind, including any storage media associated with computers, including, but not limited to, information on hard drives, floppy disks, backup tapes, and zip drives, electronic communications, including but not limited to, the Internet and shall include any drafts or revisions pertaining to any of the foregoing, all other things similar to any of the foregoing, however denominated by A-1, any other data compilations from which information can be obtained, translated if necessary, into a usable form and any other documents. For purposes of this request, any document which contains any note, comment, addition, deletion, insertion, annotation, or otherwise comprises a non-identical copy of another document shall be treated as a separate document subject to production.

In all cases where original and any non-identical copies are not available, "document(s)" also means any identical copies of the original and all non-identical copies thereof. Any document, record, graph, chart, film or photograph originally produced in color must be provided in color. Furnish all documents whether verified by A-1 or not. If a document is not in the English language, provide both the original document and an English translation of the document.

- **Other Terms:** To the extent that they are used in these information requests, the terms "claim," "consumer complaint," "dealer field report," "field report," "fire," "fleet," "good will," "make," "model," "model year," "notice," "property damage," "property damage claim," "rollover," "type," "warranty," "warranty adjustment," and "warranty claim," whether used in singular or in plural form, have the same meaning as found in 49 CFR 579.4.

In order for my staff to evaluate the alleged defect, certain information is required. Pursuant to 49 U.S.C. § 30166, please provide numbered responses to the following information requests. Insofar as A-1 has previously provided a document to ODI, A-1 may produce it again or identify the document, the document submission to ODI in which it was included and the precise location in that submission where the document is located. When documents are produced, the documents shall be produced in an identified, organized manner that corresponds with the organization of this information request letter (including all individual requests and subparts). When documents are produced and the documents would not, standing alone, be self-explanatory, the production of documents shall be supplemented and accompanied by explanation.

Please repeat the applicable request verbatim above each response. After A-1's response to each request, identify the source of the information and indicate the last date the information was gathered.

1. State, by model and model year, the number of subject vehicles manufactured, altered or modified by A-1. Separately, for each subject vehicle manufactured, altered or modified to date by A-1, state the following:
  - a. Vehicle identification number (VIN);
  - b. Make;
  - c. Model;
  - d. Model Year;
  - e. Whether A-1 is the incomplete vehicle manufacturer, intermediate manufacturer, final-stage manufacturer, alterer or modifier;
  - f. Subject component part number and design version installed as original equipment;
  - g. Date of manufacture;
  - h. Date warranty coverage commenced; and
  - i. The State in the United States where the vehicle was originally sold or leased (or delivered for sale or lease).

Provide the table in Microsoft Access 2010, or a compatible format, entitled "PRODUCTION DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

2. State the number of each of the following, received by A-1, or of which A-1 is otherwise aware, which relate to, or may relate to, the alleged defect in the subject vehicles:
  - a. Consumer complaints, including those from fleet operators;
  - b. Field reports, including dealer field reports;
  - c. Reports involving a crash, injury or fatality;
  - d. Reports involving a fire, explosion or burst CNG fuel container;
  - e. Reports involving a CNG fuel container that sustained Level 2 or Level 3 damage as defined by the Compressed Gas Association, Inc. (CGA) publication C-6.4-2012, "Methods For External Visual Inspection Of Natural Gas Vehicle (NGV) And Hydrogen Gas Vehicle (HGV) Fuel Containers And Their Installations, Fourth Edition";
  - f. Property damage claims;
  - g. Third-party arbitration proceedings where A-1 is or was a party to the arbitration; and
  - h. Lawsuits, both pending and closed, in which A-1 is or was a defendant, codefendant, plaintiff or coplaintiff.

For subparts "a" through "g," state the total number of each item (e.g., consumer complaints, field reports, etc.) separately. Multiple incidents involving the same vehicle are to be counted separately. Multiple reports of the same incident are also to be counted separately (i.e., a consumer complaint and a field report involving the same incident in which a crash occurred are to be counted as a crash report, a field report and a consumer complaint).

In addition, for items "c" through "h," provide a summary description of the alleged problem and causal and contributing factors and A-1's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "g" and "h," identify the parties to the action, as well as the caption, court, docket number, and date on which the complaint or other document initiating the action was filed.

3. Separately, for each item (complaint, report, claim, notice, or matter) within the scope of your response to Request No. 2, state the following information:
  - a. A-1's file number or other identifier used;
  - b. The category of the item, as identified in Request No. 2 (i.e., consumer complaint, field report, etc.);
  - c. Vehicle owner or fleet name (and fleet contact person), address, and telephone number;
  - d. Vehicle's VIN;
  - e. Vehicle's make, model and model year;
  - f. Vehicle's mileage at time of incident;
  - g. Incident date;
  - h. Report or claim date;
  - i. Whether a crash is alleged;
  - j. Whether a fire, explosion or burst CNG fuel container is alleged;
  - k. Whether a CNG fuel container allegedly sustained Level 2 or Level 3 damage;
  - l. Whether property damage is alleged;

- m. Number of alleged injuries, if any;
- n. Number of alleged fatalities, if any; and
- o. Whether the vehicle has allegedly been repaired and returned to service; if yes, please describe the repair, including the replacement equipment part number(s) and design version(s) and description(s), and whether A-1 or someone else performed the repairs.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "REQUEST NUMBER TWO DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

4. Produce copies of all documents related to each item within the scope of Request No. 2. Organize the documents separately by category (i.e., consumer complaints, field reports, etc.) and describe the method A-1 used for organizing the documents. Describe in detail the search methods and search criteria used by A-1 to identify the items in response to Request No. 2.
5. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by A-1 to date that relate to, or may relate to, the alleged defect in the subject vehicles: warranty claims; extended warranty claims; claims for good will services that were provided; field, zone, or similar adjustments and reimbursements; and warranty claims or repairs made in accordance with a procedure specified in a technical service bulletin or customer satisfaction campaign.

Separately, for each such claim, state the following information:

- a. A-1's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Repair date;
- e. Vehicle mileage at time of repair;
- f. Repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- g. Labor operation number;
- h. Problem code;
- i. Replacement equipment part number(s) and description(s);
- j. Concern stated by customer; and
- k. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2010, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table that provides further details regarding this submission.

6. Describe in detail the search methods and search criteria used by A-1 to identify the claims in response to Request No. 5, including the labor operations, problem codes, part numbers and any other pertinent parameters used. Provide a list of all labor operations, labor operation descriptions, problem codes, and problem code descriptions applicable to the alleged defect in the subject vehicles. State, by make and model year, the terms of the new vehicle warranty coverage offered by A-1 on the subject vehicles (i.e., the number of months and

mileage for which coverage is provided and the vehicle systems that are covered). Describe any extended warranty coverage option(s) that A-1 offered for the subject vehicles and state by option, model, and model year, the number of vehicles that are covered under each such extended warranty.

7. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the alleged defect in the subject vehicles, that A-1 has issued to any dealers, distributors, regional or zone offices, field offices, fleet purchasers, or other entities. This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications, with the exception of standard shop manuals. Also include the latest draft copy of any communication that A-1 is planning to issue within the next 120 days.
8. 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, A-1. 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.

9. Describe all modifications or changes made by, or on behalf of, A-1 in the design, material composition, manufacture, quality control, supply, or installation of the subject component, from the start of production to date, which relate to, or may relate to, the alleged defect in the subject vehicles. For each such modification or change, provide the following information:
  - a. The date or approximate date on which the modification or change was incorporated into vehicle production;
  - b. A detailed description of the modification or change;
  - c. The reason(s) for the modification or change;
  - d. The part number(s) (service and engineering) of the original component;
  - e. The part number(s) (service and engineering) of the modified component;
  - f. Whether the original unmodified component was withdrawn from production and/or sale, and if so, when;
  - g. When the modified component was made available as a service component; and
  - h. Whether the modified component can be interchanged with earlier production components.



Also, provide the above information for any modification or change that A-1 is aware of which may be incorporated into vehicle production within the next 120 days.

10. Produce one of each of the following:

- a. Exemplar samples of each design version of the subject component; and
- b. Any kits that have been released, or developed, by A-1 for use in service repairs to the subject component/assembly which relate, or may relate, to the alleged defect in the subject vehicles.

11. State the number of each of the following that A-1 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 component; and
- b. Any kits that have been released, or developed, by A-1 for use in service repairs to the subject component/assembly.

For each component part number, provide the supplier's name, address, and appropriate point of contact (name, title, and telephone number).

12. Describe A-1's participation in Ford Motor Company's Qualified Vehicle Modifier (QVM) Program, including:

- a. The application and qualification process, including any periodic requalification processes;
- b. A-1's adherence to the Ford Truck Body Builder Advisory Service Process Control Guidebook;
- c. A-1's adherence to the Ford QVM Common Guidebook and Ship-Thru Guidelines;
- d. A-1's adherence to Ford QVM Bulletin Q-185R1; and
- e. What direct and/or indirect oversight and/or guidance Ford provides to A-1.

13. Furnish A-1's assessment of the alleged defect in the subject vehicle, including:

- a. The causal or contributory factor(s);
- b. The failure mechanism(s);
- c. The failure mode(s);
- d. The risk to motor vehicle safety that it poses;
- e. What warnings, if any, the operator and the other persons both inside and outside the vehicle would have that the alleged defect was occurring or subject component was malfunctioning; and
- f. The reports included with this inquiry.

### Legal Authority for This Request

This letter is being sent to A-1 pursuant to 49 U.S.C. § 30166, which authorizes NHTSA to conduct any investigation that may be necessary to enforce Chapter 301 of Title 49 and to request reports and the production of things. It constitutes a new request for information.

### Civil Penalties

A-1's failure to respond promptly and fully to this letter could subject A-1 to civil penalties pursuant to 49 U.S.C. § 30165 or lead to an action for injunctive relief pursuant to 49 U.S.C. § 30163. (Other remedies and sanctions are available as well.) The Vehicle Safety Act, as amended, 49 U.S.C. § 30165(a)(3), provides for civil penalties of up to \$7,000 per violation per day, with a maximum of \$35,000,000 for a related series of daily violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. This includes failing to respond completely, accurately, and in a timely manner to ODI information requests. The maximum civil penalty of \$7,000 per violation per day is established by 49 CFR 578.6(a)(3). The maximum civil penalty of \$35,000,000 for a related series of daily violations of 49 U.S.C. § 30166 is authorized by 49 U.S.C. § 30165(a)(3) as amended by § 31203(a)(1)(B) of the Moving Ahead for Progress in the 21<sup>st</sup> Century Act, Public Law 112-141.

If A-1 cannot respond to any specific request or subpart(s) thereof, please state the reason why it is unable to do so. If on the basis of attorney-client, attorney work product, or other privilege, A-1 does not submit one or more requested documents or items of information in response to this information request, A-1 must provide a privilege log identifying each document or item withheld, and stating the date, subject or title, the name and position of the person(s) from, and the person(s) to whom it was sent, and the name and position of any other recipient (to include all carbon copies or blind carbon copies), the nature of that information or material, and the basis for the claim of privilege and why that privilege applies.

### Confidential Business Information

**All business confidential information must be submitted directly to the Office of Chief Counsel as described in the following paragraph and should not be sent to this office.** In addition, do not submit any business confidential information in the body of the letter submitted to this office. Please refer to PE13-038 in A-1's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If A-1 claims that any of the information or documents provided in response to this information request constitute confidential commercial material within the meaning of 5 U.S.C. § 552(b)(4), or are protected from disclosure pursuant to 18 U.S.C. § 1905, A-1 must submit supporting information together with the materials that are the subject of the confidentiality request, in accordance with 49 CFR Part 512, as amended, to the Office of Chief Counsel (NCC-111), National Highway Traffic Safety Administration, Room W41-227, 1200 New Jersey Avenue, S.E., Washington, D.C. 20590. A-1 is required to **submit two copies of the documents containing allegedly confidential information (except only one copy of blueprints) and one copy of the documents from which information claimed to be confidential has been deleted.**

Please remember that the phrase "ENTIRE PAGE CONFIDENTIAL BUSINESS INFORMATION" or "CONTAINS CONFIDENTIAL BUSINESS INFORMATION" (as appropriate) must appear at the top of each page containing information claimed to be confidential, and the information must be clearly identified in accordance with 49 CFR 512.6. If you submit a request for confidentiality for all or part of your response to this IR, that is in an electronic format (e.g., CD-ROM), your request and associated submission must conform to the new requirements in NHTSA's Confidential Business Information Rule regarding submissions in electronic formats. *See* 49 CFR 512.6(c) (as amended by 72 Fed. Reg. 59434 (October 19, 2007)).

If you have any questions regarding submission of a request for confidential treatment, contact Otto Matheke, Senior Attorney, Office of Chief Counsel at otto.matheke@dot.gov or (202) 366-5253.

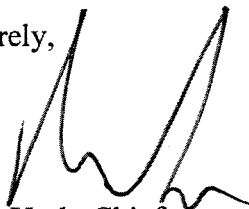
### **Due Date**

A-1's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by February 7, 2014. A-1's response must include all non-confidential attachments and a redacted version of all documents that contain confidential information. If A-1 finds that it is unable to provide all of the information requested within the time allotted, A-1 must request an extension from me at (202) 366-6938 no later than five business days before the response due date. If A-1 is unable to provide all of the information requested by the original deadline, it must submit a partial response by the original deadline with whatever information A-1 then has available, even if an extension has been granted.

Please send email notification to Mr. Kyle Bowker of my staff at kyle.bowker@dot.gov and to ODI\_IRresponse@dot.gov when A-1 sends its response to this office and indicate whether there is confidential information as part of A-1's response.

If you have any technical questions concerning this matter, please call Mr. Kyle Bowker of my staff at (202) 366-9597.

Sincerely,



Bruce York, Chief  
Medium & Heavy Duty Vehicles Division  
Office of Defects Investigation

Enclosure: One (1) CD-ROM titled Data Collection Disc containing three Microsoft Access database template files, an electronic copy of the subject complaint identified by NHTSA Reference Number 10534095, and an electronic copy of the Safety Recall Compendium.