



U.S. Department
of Transportation
**National Highway
Traffic Safety
Administration**

JUN 19 2013

1200 New Jersey Avenue SE.
Washington, DC 20590

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Ron Eickelman, President
Agility Fuel Systems, Inc.
5409 Maryland Way, Suite 215
Brentwood, TN 37027

NVS-214kmb
PE13-019

Dear Mr. Eickelman:

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 (PE13-019) to investigate the four conditions detailed in the Technical Service Bulletin (TSB) from Agility Fuel Systems, Inc. (Agility), titled "ENP-047 Rail Mount Periodic Maintenance and Inspection Schedule," and to request certain information.

As you are aware, in the subject TSB, Agility describes a revised periodic maintenance and inspection schedule that applies four specific checks and actions related to compressed natural gas (CNG) fuel system container(s) and their installation: (1) fuel container mounting bracket torque; (2) fuel container rotational movement; (3) fuel container mounting bracket rubber isolator displacement; and (4) fuel container manual valve stuck in the closed position.

According to Agility, as the fuel container expands and contracts during fuelling and routine use, it may be possible for the fuel container to become loose within the bracket system, which may lead to rotational movement of the fuel container. Additionally, in some frame rail mounted applications, the brackets used to secure the fuel container are equipped with supports for a step tread to assist vehicle occupant ingress and egress. Over time, the force applied to the step tread may contribute to the rotational movement of the fuel container. Such rotational movement may result in: (1) abrasion to the hoop wrap, that may compromise the structural integrity of the fuel container, depending on the depth of the abrasion; (2) damage to high-pressure fuel lines, which may result in a fuel leak or a disruption of fuel flow to the engine; and (3) the pressure relief device (PRD) becoming oriented in such a way that the PRD exit and associated vent line (if equipped) may accumulate foreign debris or fluids or otherwise disrupt the fuel flow in the event the PRD must vent to atmosphere. Also, rubber isolator displacement may expose the fuel container to increased risk of abrasion damage.

ODI is especially concerned about the report that certain fuel container manual valves supplied by Youngdo Industrial Co., Ltd. (Youngdo) and used by Agility in certain applications may stick in the "closed" position due to the seat becoming detached from the stem. This detached seat



may block fuel flow from the affected fuel container. In some cases, the valve may stick in the "closed" position even though the handle can be turned to the "open" position. According to Agility, the valve retains the ability to stop fuel from flowing from the fuel container when turned to the "closed" position. However, if the valve should become stuck in the "closed" position, the total available fuel will be reduced and the vehicle's effective operating range will be severely limited, which may result in the vehicle becoming disabled in or near the roadway, exposing the vehicle and its occupants to increased risk of a crash.

Also, because they will not have an accurate reading of the fuel pressure in the affected fuel container, this condition may pose risk of injury to service personnel in the event the affected container must be depressurized, such as when a fuel system component has failed or when a fuel container has sustained Level 2 or Level 3 damage and must be removed from the vehicle for repair or replacement. In some cases the need to depressurize the fuel system is urgent and must be accomplished quickly to reduce risk of catastrophic container failure and/or fire. According to the Clean Vehicle Education Foundation, "CNG cylinders are designed tested and labeled for a maximum service life and must be safely disposed of at their end of life (EOL). In these cases, the old cylinder must be safely emptied and destroyed separate from the vehicle." There is no doubt that the subject components will need to be defueled and the Youngdo manual valves will need to be removed by service personnel at some point. If the valve does not function properly, it poses a safety hazard. By letter dated November 8, 2012, Youngdo notified Agility that "All [Youngdo YNC-2802-1] valves should be updated with a new stem and seat assembly."

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

- **Subject vehicles:** All NGVs manufactured for sale or lease in the United States equipped by Agility with CNG fuel systems and/or CNG fuel containers.
- **Subject component(s):** All CNG fuel containers manufactured for use on the subject vehicles.
- **Subject bulletin:** Technical Service Bulletin from Agility titled "ENP-047 Rail Mount Periodic Maintenance and Inspection Schedule."
- **Agility:** Agility Fuel Systems, Inc., FAB Holdings, Inc. (d.b.a. FAB Industries), Enviromech Industries LLC, 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 Agility (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:** When any subject vehicle(s) and/or subject component(s) exhibit any one or more of the four conditions detailed in the subject bulletin.
 - **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 Agility, 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 Agility 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 Agility has previously provided a document to ODI, Agility 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 Agility’s response to each request, identify the source of the information and indicate the last date the information was gathered.

1. For each subject vehicle equipped by Agility from January 1, 2010 to date, state the following:
 - a. Vehicle identification number (VIN);
 - b. Vehicle manufacturer;
 - c. Vehicle make;
 - d. Vehicle model;
 - e. Vehicle model year;
 - f. Quantity of subject components so equipped (e.g. One, Two, Four, Six);
 - g. Type of subject components so equipped (Type 1, 2, 3 and/or 4 as defined by 49 CFR 571.304);
 - h. Location of subject components so equipped (roof mount, behind cab, side frame rail, front of body);
 - i. Manufacturer, part number and description of subject components so equipped (e.g. Hexagon Lincoln Tuffshell size 21.1x80, Quantum Technologies size 25x80 p/n 113508);
 - j. Manufacturer, part number and description of subject component valves so equipped (e.g. Youngdo YNC-2802-1 manual valves, OMB VEGA118 solenoid valves);
 - k. The date(s) marking the end of the manufacturer’s recommended service life for the subject components so equipped; and
 - l. The date the fuel system integration and/or subject component installation was completed by Agility.

Provide the table in Microsoft Access 2000, or a compatible format, entitled “PRODUCTION DATA.” See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

2. State the number of each of the following, received by Agility, or of which Agility 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;
 - e. Property damage claims;
 - f. Third-party arbitration proceedings where Agility is or was a party to the arbitration; and
 - g. Lawsuits, both pending and closed, in which Agility is or was a defendant or codefendant.

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 "g," provide a summary description of the alleged problem and causal and contributing factors and Agility's assessment of the problem, with a summary of the significant underlying facts and evidence. For items "f" and "g," 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. Describe in detail the methodology and search criteria used by Agility to identify the claims identified in response to Request No. 2. Also, describe in detail the methodology used by Agility during the routine course of business to record and manage the types of items in Request No. 2 (e.g., consumer complaints, field reports, etc.), identify safety related concerns and elevate them to key decision makers at Agility who may decide whether or not a safety related defect exists that poses an unreasonable risk to motor vehicle safety.
4. 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. Agility'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. VIN;
 - e. Vehicle make, model and model year;
 - f. Vehicle mileage at time of incident;
 - g. Incident date;
 - h. Report or claim date;
 - i. Whether a crash is alleged;
 - j. Whether a fire is alleged;
 - k. Whether property damage is alleged;
 - l. Number of alleged injuries, if any; and
 - m. Number of alleged fatalities, if any.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "INCIDENT DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

5. Produce electronic 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 Agility used for organizing the documents.
6. State, by model and model year, a total count for all of the following categories of claims, collectively, that have been paid by Agility 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. Agility's claim number;
- b. Vehicle owner or fleet name (and fleet contact person) and telephone number;
- c. VIN;
- d. Vehicle make, model and model year;
- e. Vehicle mileage at time of repair;
- f. Repair date;
- g. Whether the repair was performed by Agility personnel. If yes, state whether the repair was performed in the field or at an Agility facility, and state the city and state or ZIP code where the repair was performed;
- h. If the repair was not performed by Agility, state the repairing dealer's or facility's name, telephone number, city and state or ZIP code;
- i. Labor operation number;
- j. Problem code;
- k. Replacement part number(s) and description(s);
- l. Concern stated by customer; and
- m. Comment, if any, by dealer/technician relating to claim and/or repair.

Provide this information in Microsoft Access 2000, or a compatible format, entitled "WARRANTY DATA." See Enclosure 1, Data Collection Disc, for a pre-formatted table which provides further details regarding this submission.

7. Describe in detail the search criteria used by Agility to identify the claims identified 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 the terms of the warranty coverage offered by Agility 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 Agility offered for the subject vehicles and state the number of vehicles that are covered under each such extended warranty.

8. Produce copies of all service, warranty, and other documents that relate to, or may relate to, the following, which Agility has issued to any dealers, regional or zone offices, field offices, fleet purchasers, customers or other entities:
 - a. The alleged defect in the subject vehicles;
 - b. Depressurizing or defueling the subject components; and
 - c. Servicing and/or removing subject component valves.

This includes, but is not limited to, bulletins, advisories, informational documents, training documents, or other documents or communications. Also include the latest draft copy of any communication that Agility is planning to issue within the next 120 days. Also, describe the method(s) by which Agility distributes service bulletins in general and the subject bulletin in particular (e.g. publication on the Agility website, customer e-mail, customer postal mail, by special request only, etc.).

9. State the number of each of the following, received by Agility, or of which Agility is otherwise aware, which relate to, or may relate to, the subject components in the subject vehicles:
 - a. Requests for service or for service information that relate to depressurizing or defueling the subject components;
 - b. Requests for service or for service information that relate to servicing and/or removing subject component valves;
 - c. The number of subject components with Level 2 damage that was deemed repairable; and
 - d. The number of subject components with Level 3 damage that required they be removed from service and destroyed.
10. 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, Agility. 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.

11. Describe all modifications or changes made by, or on behalf of, Agility 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 Agility is aware of which may be incorporated into vehicle production within the next 120 days.

12. Produce one of each of the following:
 - a. Exemplar sample of a Youngdo manual CNG valve model no. YNC-2802-1;
 - b. Field return sample of a Youngdo manual CNG valve model no. YNC-2802-1 exhibiting the failure mode outlined in the subject bulletin; and
 - c. Exemplar sample of any subject component valves or valve repair kits that have been released, or developed, by Agility or Youngdo for use in service repairs to the subject vehicles which relate, or may relate, to the alleged defect in the subject vehicles.
13. State the number of each of the following that Agility 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. Youngdo manual CNG valve model no. YNC-2802-1; and
 - b. Any subject component valves or valve repair kits that have been released, or developed, by Agility or Youngdo 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). Also, please identify any other CNG fuel system integrators or equipment suppliers doing business in the United States, of which Agility is aware, that may be equipping NGVs with the Youngdo manual CNG valve model no. YNC-2802-1, whether installed in production or in service.

14. Furnish Agility'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. Agility's rationale why it has so far chosen to not heed Youngdo's warning that "All [Youngdo YNC-2802-1] valves should be updated with a new stem and seat assembly" by proactively repairing or replacing all affected valves immediately, rather than opting to repair or replace them only as they fail in service;
- e. Agility's confidence that subject vehicle customers will both be aware of and actually continue to perform the adjusted inspection and maintenance schedule described in the subject bulletin from now until the end of the subject component manufacturer's recommended service life;
- f. 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 and/or valve was malfunctioning; and
- g. The risk to motor vehicle safety that it poses.

Legal Authority for This Request

This letter is being sent to Agility 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

Agility's failure to respond promptly and fully to this letter could subject Agility 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(b), provides for civil penalties of up to \$7,000 per day, with a maximum of \$17,350,000 for a related series of violations, for failing or refusing to perform an act required under 49 U.S.C. § 30166. *See* 49 CFR 578.6 (as amended by 77 Fed. Reg. 70710 (November 27, 2012)). This includes failing to respond completely to ODI information requests.

If Agility 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, Agility does not submit one or more requested documents or items of information in response to this information request, Agility 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 PE13-019 in Agility's response to this letter and in any confidentiality request submitted to the Office of Chief Counsel.

If Agility 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, Agility 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. Agility 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.

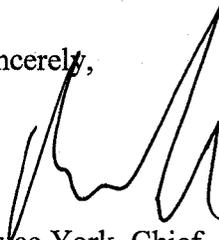
Due Date

Agility's response to this letter, in duplicate, together with a copy of any confidentiality request, must be submitted to this office by Thursday, August 1, 2013. If Agility finds that it is unable to provide all of the information requested within the time allotted, Agility must request an extension from me at (202) 366-6938 no later than five business days before the response due date. If Agility 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 Agility then has available, even if an extension has been granted.

Please send email notification to Kyle Bowker at kyle.bowker@dot.gov and to ODI_IRresponse@dot.gov when Agility sends its response to this office and indicate whether there is confidential information as part of Agility's response.

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

Sincerely,

A handwritten signature in black ink, appearing to be 'B. York', written over the word 'Sincerely,'.

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

Enclosure 1, one CD-ROM titled Data Collection Disc containing three Microsoft Access database template files.