

Safety Defect and Noncompliance Report Guide for Equipment

PART 573 Defect and Noncompliance Report

Date: 6/11/13

This report serves as [insert reporting party’s name]’s notification to the U.S. Department of Transportation, National Highway Traffic Safety Administration that a [insert as applicable: “defect related to motor vehicle safety” or “noncompliance with Federal Motor Vehicle Safety Standards”] exists in certain [identify the equipment at issue]. [Manufacturer] decided that this [insert “defect” or “noncompliance,” as applicable] existed in these vehicles on [insert date].

I. Manufacturer, Designated Agent, and Other Chain of Distribution Information

Manufacturer’s corporate name: **Sutrak USA**

Equipment’s brand or trademark name owner(s) (where applicable):

Designated Agent (imported equipment):

N/A

If this notification concerns equipment that was installed in new motor vehicles or new items of motor vehicle equipment, identify by name, address, and telephone number each vehicle manufacturer and equipment manufacturer who purchased that equipment:

North American Bus Industries, Inc.

106 National Drive

Anniston, Alabama 36207

256-831-4296

If this notification concerns a defective or noncompliant component that the above identified manufacturer did not manufacture, identify that component and provide the name, address, and phone number of the manufacturer of the component (if this manufacturer is unknown, provide this information as to the supplier of the component):

Defective part is Eagle Plastics Device 441-R364-GR which is sold by Mouser Electronics.

1000 North Main Street

Mansfield, Texas 76053

800-346-6873

www.mouser.com

Name, address, email, and phone and fax numbers for the person(s) to whom inquiries about this report should be directed:

Dan van der Hoop

6897 East 49th Ave.

Commerce City, Colorado 80022

303-287-2700 ext. 110

dvanderhoop@sutrakusa.com

Manufacturer's assigned campaign number (where applicable):

II. Identification of the Recall Population and Its Size

Complete the tables below for each item of equipment subject to this notification. Additional tables may be necessary where there are more than three items subject to a notification.

Type of equipment (e.g., tire, child restraint, headlamp): HVAC system
Part/Model number: ACE219G 719.045G
Size and function (where applicable): Heating, Ventilation, and Air Conditioning system for the 40' low floor CNG bus manufactured by NABI for DART 39000 series buses
Inclusive dates of manufacture (month and year): May 2012 to May 2013
Other information necessary to describe this equipment:
Total number of these items of equipment: 154 Buses are involved in this report each with one fuse holder per system.

Type of equipment (e.g., tire, child restraint, headlamp):
Part/Model number:
Size and function (where applicable):
Inclusive dates of manufacture (month and year):
Other information necessary to describe this equipment:
Total number of these items of equipment:

Type of equipment (e.g., tire, child restraint, headlamp):
Part/Model number:
Size and function (where applicable):
Inclusive dates of manufacture (month and year):
Other information necessary to describe this equipment:
Total number of these items of equipment:

Provide the following information as to all the items of equipment (“the recall population”) identified above:

Grand total number of items of equipment in the recall population: 154 buses

The percentage of the recall population you estimate actually contain the defect or noncompliance:
60%

Identify and describe how the recall population was determined (e.g., on what basis the recalled models were selected and how the inclusive dates of manufacture were determined):

This system was designed specifically for this project with DART. All buses delivered to date are to be inspected and part replaced where installed in the vehicle. Units not delivered at the time defective part identified were corrected at Sutrak manufacturing facility, buses delivered to DART have been reworked at NABI in Anniston, AL. The remaining buses have been inspected and reworked as warranty repair at the customers location in Dallas, TX.

Describe how the recall population is different from any similar items of equipment not subject to this notification:

This HVAC system was specifically designed for this project and the defective part has not been used in this configuration prior to this contract.

III. Description of the Defect or Noncompliance and Chronology of Events

Describe the defect or noncompliance, including a summary and detailed description of the nature and physical location (if appropriate) of the defect or noncompliance. Graphic aids should be provided where necessary.

The fuse holder is used for circuit protection in the generator regulator circuit and is located inside the HVAC system. The defective fuse holders allow intermittent connection in the generator control circuit which causes intermittent voltage spikes on the generator output. These spikes can cause damage to the connector which delivers power from the generator to the HVAC system electrical distribution box.

Describe the cause(s) of the defect or noncompliance condition.

The fuse holder is fabricated in such a way that the wire that connects the load to the fuse can lock into an extended position which allows for intermittent connections to the fuse. These intermittent conditions cause the circuit to momentarily open circuit with the normal vibrations seen when the bus is in operation. The fuse holder in question has been removed from our list of acceptable component in the manufacture of our HVAC systems.

Describe the consequence(s) of the defect or noncompliance condition.

The fuse holder allows in some conditions for the fuse to make intermittent connections within the fuse holder. Since this fuse does not maintain continuity within the generator control circuit, it causes the generator to intermittently produce voltage spikes on the generator output voltage. These spikes in some cases cause damage to the insulation in the connector that delivers power from the generator to the electrical distribution box of the HVAC system. This then causes an electrical fault within the power connector.

Identify any warning(s) that may precede the defect or noncompliance condition.

The HVAC system may momentarily shut off and restart at what are random times when the system should be in continuous operation. Another symptom of the problem may appear as a generator which does not produce any output voltage due to the lack of the control signal from the voltage regulator which protected by this fuse holder and fuse.

For defects, provide a dated, chronological summary of all the principle events that were the basis for the determination that the defect is related to motor vehicle safety, including a summary of all warranty claims, field or service reports, and other information such as numbers of crashes, injuries and fatalities.

January 14, 2013 warranty repair of bus 39021 for connector failure on generator output cable. No root cause identified at the time.
April 23-May 15, 2013 we saw similar failures on buses 39049, 39080, and 39104. CT scans were performed on the connectors that failed and an over voltage condition identified as the cause of the failure. It was determined that the intermittent connection in the fuse holder caused the over voltage spikes in the generator output.

For noncompliances, identify the test results and other information considered in determining the existence of the noncompliance, and provide the date of each test and observation indicative of that noncompliance.

IV. The Remedy Program and Its Schedule

Describe the program for remedying the defect or noncompliance, including the plan for reimbursing those owners and purchasers who may have incurred costs to remedy the defect or noncompliance before receiving the manufacturer's notification concerning that defect or noncompliance. Also include, where applicable, details with dates concerning any production remedy that was conducted or will be conducted.

Once the root cause of the failure was identified as the defective fuse holder, a replacement part was identified and brought in for testing and release to production. All units produced after serial number 52637-19-2113 have included the replacement fuse holder. Field Modification Instructions were released on May 20, 2013 and all buses not delivered to DART which were at the NABI manufacturing facility in Anniston, AL were reworked before delivery to DART. A campaign was completed on June 3, 2013 to rework all buses which had been delivered to DART with the defective fuse holder.

Provide the estimated date(s) on which owner and purchaser notifications will be issued and the estimated date(s) for completion of those notifications.

There are only two owners of the vehicles involved with this defect. The owner of the vehicles are either North American Bus Industries, Inc. who manufactures the buses in Anniston, AL or Dallas Area Rapid Transit in Dallas, TX who is the end user of the vehicles. Both parties have been actively involved in the root cause analysis of the failures and will be formally notified by the required notice by June 12, 2013.

Provide the estimated date(s) on which dealer and distributor notifications will be issued and the estimated date(s) for completion of those notifications.

Not applicable.

Describe the distinguishing characteristics of the remedy component/assembly versus the recalled component/assembly.

The original fuse holders are rated for 10A and use 16AWG wire while the replacement fuse holders are rated for 20A and use 12AWG wires. Suttrak part numbers for the original parts is 107.444 and was replaced by 107.445.