OMB Control No.: 2127-0004

Part 573 Safety Recall Report

21V-962

Manufacturer Name: Sutphen Corporation

Submission Date: DEC 13, 2021 **NHTSA Recall No.:** 21V-962

Manufacturer Recall No.: NR



Manufacturer Information:

Manufacturer Name: Sutphen Corporation

Address: 6450 Eiterman Rd

Dublin OH 43016

Company phone: 6148891005

Population:

Number of potentially involved: 184 Estimated percentage with defect: 1 %

Vehicle Information:

Vehicle 1: 2016-2020 Sutphen Fire truck

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style:

Power Train: DIESEL

Descriptive Information: These truck engines are equipped with High Pressure Common Rail fuel systems. The

recall consists of the entire

population of engines equipped with a certain Injector Fuel Supply Tube (fuel

tube) prior to the implementation of corrective action

Production Dates: APR 26, 2016 - NOV 01, 2021

VIN Range 1 : Begin : NR End : NR Not sequential

Description of Defect:

Description of the Defect: The fuel tubes between the fuel rail and the injector for cylinders 4, 5 and 6

may be susceptible to cracking, resulting in a high pressure fuel leak.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A high pressure fuel leak in the presence of an ignition source may increase

the risk of a fire.

Description of the Cause: The subject fuel tubes (for cylinders 4, 5 and 6) are susceptible to cracking due

to metal fatigue failure resulting from a combination of vibration strain,

assembly strain and material strength.

Identification of Any Warning Fuel leaks may be detected during maintenance. An operator may smell fuel or

that can Occur: observe a mist due to the fuel leak.

Involved Components:

Component Name 1: Injector Fuel Supply Tube

Component Description: Fuel tube between fuel rail and fuel injector

Component Part Number: 5536516

Component Name 2: Injector Fuel Supply Tube

Component Description: Fuel tube between fuel rail and fuel injector

Component Part Number: 5486389

Component Name 3: Injector Fuel Supply Tube

Component Description: Fuel tube between fuel rail and fuel injector

Component Part Number: 3695190

Supplier Identification:

Component Manufacturer

Name: Usui International Corporation

Address: 44780 Helm Street

Plymouth Michigan 48170

Country: United States

Chronology:

19Apr2021 – Cummins received a Technical Service Request for a leaking fuel tube on an X12 engine.

19Apr-23Jul2021 – Cummins received additional reports of leaking fuel tubes on X12 engines and escalated the issue for further investigation.

23Jul2021 – Cummins initiated a Product Problem Solving (PPS) project to investigate the cause of the fuel tube leaks.

Aug-Oct2021 – Cummins continued to investigate this issue, including obtaining and analyzing parts from the field, conducting testing to understand the cause of the failures and evaluating potential corrective action. As part of the investigation, Cummins identified 29 warranty claims for fuel tube fuel leaks (not all of which had cracked tubes) with a date range of March 6, 2020 through September 22, 2021 (as of September 22, 2021).

190ct2021 - Cummins investigated a September 2021 fire on a vehicle equipped with an X12 engine.

250ct2021 - Cummins identified a leak of the #5 cylinder fuel tube as the cause of the fire.

280ct2023 - Cummins completed a Product Safety Hazard Analysis.

1Nov-23Nov2021 – Cummins escalated the issue through its Product Safety Defect Board process.

23Nov2023 - Based upon the results of the investigation, the Cummins Product Safety Defect Board decided to

conduct a safety campaign to address this condition. To date, there have been no reports of injuries due to this

03Dec2021 - Sutphen Corp received recall 21E-099

Description of Remedy:

Description of Remedy Program: For engines having 75 miles or less, the remedy will consist of adding

vibration isolators to the fuel tubes; fuel tubes do not need to be replaced. For all other engines, the subject fuel tubes for cylinders 4, 5 and 6 (the rear half of the engine) will be replaced with new fuel tubes (having the same part number as the recalled components) and vibration isolators will be added to the fuel tubes to engines. Subject trucks are covered under the

manufacturer's limited warranty.

How Remedy Component Differs The replacement fuel tubes will also have vibration isolators. The fuel

from Recalled Component: tube and vibration isolator combination will have a new part number.

Identify How/When Recall Condition The injector alignment to the cylinder head was improved by was Corrected in Production: implementing an improved alignment fixture during engine assembly and

vibration isolators were added to the fuel tubes during engine assembly on

November 2, 2021.

Recall Schedule:

Description of Recall Schedule: Cummins expects to notify affected OEMs no later than December 10,

2021. Cummins will conduct the recall and notify owners. The timing of owner notification will be determined in consultation with the affected OEMs and subject to availability of addresses from the affected OEMs.

The recall schedule is being developed.

Planned Dealer Notification Date: NR - NR Planned Owner Notification Date: NR - NR

* NR - Not Reported