OMB Control No.: 2127-0004

Part 573 Safety Recall Report

21V-891

Manufacturer Name: Sutphen Corporation

Submission Date: NOV 17, 2021 **NHTSA Recall No.:** 21V-891

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 : 20 Estimated percentage with defect : 100 %

Vehicle Information:

Vehicle 1: 2020-2020 Sutphen Fire truck

Vehicle Type: BUSES, MEDIUM & HEAVY VEHICLES

Body Style:

Power Train: DIESEL

Descriptive Information: Recall is based on vehicles equipped with power steering pumps supplied by ZF.

Sutphen part number is 10079830 and there are a total of 20 units. Each pump from ZF has an identifying serial number. At this time there is a range of Sutphen trucks

that could have the pumps installed.

Production Dates: OCT 01, 2020 - NOV 30, 2020

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

Description of Defect:

Description of the Defect: Certain power steering pumps

supplied by ZF may cause pressure to build and the shaft seal to leak into the engine, resulting in a loss of power steering assist in the identified recalled vehicles. ZF's understanding is that its power steering pumps operate under conditions specific to each vehicle application. ZF is not aware of any accidents or injuries related to the recalls announced by Spartan Fire and Autocar or related to the subject power steering pumps in other manufacturers' vehicles.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: A loss of power steering assist in the

recalled vehicles could increase the risk of a crash

Description of the Cause: The rotor grinding process may have created an area of localized flatness in the

end face of the steering pump motor during manufacturing of the power steering pumps. Depending upon the vehicle application (due to applicationspecific operating conditions), the localized flatness may cause pressure to

build and the shaft seal to leak into the engine

Identification of Any Warning NR that can Occur:

Involved Components:

Component Name 1: power steering pump

Component Description: NR

Component Part Number: PS362815R10312

Supplier Identification:

Component Manufacturer

Name: ZF North America, Inc.
Address: 12001 Tech Center Drive

Livonia Michigan 48150

Country: United States

Chronology:

In July 2020, Spartan Fire notified ZF about a zero mileage issue identified in Spartan Fire's assembly plant involving power steering pumps supplied by ZF. ZF thereafter conducted an engineering analysis of affected parts, verified production parameters, performed calibrations, and verified potential corrective measures through lab measurements and testing. In September 2020, ZF identified a potential manufacturing issue. ZF continued to monitor warranty data but did not detect an issue with other vehicle manufacturers similar to what was experienced by Spartan Fire. In October 2020, ZF implemented a process sequence change in its manufacturing process to address the issue. In April 2021, Spartan Fire informed ZF of a warranty claim involving loss of power steering assist. On April 10, 2021, Spartan Fire initiated a recall of 243 vehicles containing power steering pumps supplied by ZF (21V252). In July 2021, ZF responded to an informal inquiry by NHTSA's Recall Management Division related to the Spartan Fire recall. On August 4, 2021, at the agency's request, and although ZF had not made a safety defect determination with respect to the subject power steering pumps, ZF submitted a list of purchasers to NHTSA with a Part 512 request for confidential treatment. On August 31, 2021, Autocar initiated a recall related to vehicles containing power steering pumps supplied by ZF (21V677). On September 3, 2021, NHTSA requested that ZF file a part 573 report based on the Spartan Fire and Autocar recalls. Although ZF has not determined that a safety-related defect exists in the subject power steering pumps, ZF agreed to submit a Part 573 report as requested. On October 27,2021 Sutphen received a notice from NHTSA about the report from ZF North America and received a copy of recall notice 21E-085

Description of Remedy:

Description of Remedy Program: Sutphen is in the process of determining which firetrucks have the recalled

pumps installed. ZF has supplied Sutphen with a list of serial numbers for the affected pumps. Once the recalled pumps are identified, they will be

replaced.

Vehicles are new and are covered under the manufacturer's warranty

program.

How Remedy Component Differs ZF improved the flatness profile of the rotor through adjustments in the from Recalled Component: parameters for the rotor grinding process. Components are serialized and

recalled components have been identified.

Identify How/When Recall Condition Following detection of the potential issue, ZF adjusted the parameters for was Corrected in Production: the rotor grinding process in manufacturing to improve the flatness profile

of the rotor.

Recall Schedule:

Description of Recall Schedule: Sutphen is in the process of determining which firetrucks have the

recalled pumps installed. A range of possible affected trucks have been identified. Dealers and owners will be notified and a request to examine the pumps for serial numbers will be made. Any recalled pumps will be

replaced.

Planned Dealer Notification Date: NOV 26, 2021 - DEC 31, 2021

Planned Owner Notification Date: NOV 26, 2021 - DEC 31, 2021

^{*} NR - Not Reported