

Part 573 Safety Recall Report

23V-266

Manufacturer Name : General Motors, LLC**Submission Date :** MAY 17, 2023**NHTSA Recall No. :** 23V-266**Manufacturer Recall No. :** N222375270**Manufacturer Information :**

Manufacturer Name : General Motors, LLC

Address : 29427 Louis Chevrolet Road
MAIL CODE 480-210-2V WARREN MI
48093

Company phone : 586-596-1733

Population :

Number of potentially involved : 40,428

Estimated percentage with defect : 1 %

Vehicle Information :

Vehicle 1 : 2019-2023 Chevrolet 4500HD/5500HD/6500HD

Vehicle Type :

Body Style :

Power Train : NR

Descriptive Information : Manufacturing records were used to identify vehicles built within the affected build window.

Vehicles prior to 2019 model year use a different design.

Production Dates : MAY 23, 2018 - APR 05, 2023

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**Description of Defect :**

Description of the Defect : General Motors has decided that a defect which relates to motor vehicle safety may exist in certain 2019 – 2023 model year Chevrolet Silverado Medium Duty 4500HD/5500HD/6500HD vehicles. These vehicles may have a brake pressure sensor assembly that allows brake fluid to leak beyond the diaphragm seal into the pressure switch. The brake fluid may seep into the sensor's electrical components and short the brake pressure switch and the associated fuse.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : If brake fluid shorts the brake pressure switch and the associated fuse, the circuit can generate excessive heat that could result in a fire, increasing the risk of injury. An underhood fire may occur when the vehicle is off and possibly unattended.

Description of the Cause : A zinc nickel plating and sealant used to inhibit corrosion within the pressure

sensor assembly may cause delamination of the sealant which results in small fragments of sealer underneath the diaphragm during assembly which allows brake fluid to slowly seep past the seal.

Identification of Any Warning that can Occur : Until the recall remedy is performed, owners are advised to park their vehicles outdoors. This condition may declare with a "service brake system" malfunction indicator lamp.

Involved Components :

Component Name 1 : SWITCH, BRK PRESS WRNG (W/O TEE CONNECTOR)

Component Description : Brake master cylinder pressure sensor

Component Part Number : 19407495

Supplier Identification :

Component Manufacturer

Name : Navistar, Inc.

Address : 2701 Navistar Dr.
Lisle Illinois 60532

Country : United States

Chronology :

On August 9, 2022, GM opened a product investigation following a claim of a vehicle fire on a 2019 Chevrolet Silverado Medium Duty vehicle. As part of that investigation, GM coordinated with Navistar, the manufacturer of the subject vehicles, to review field data and warranty returned brake pressure sensors.

While a series of tests failed to duplicate the SUFS vehicle's condition, on January 25, 2023, a warranty returned sensor and harness was identified which exhibited signs of heat damage. This part was subjected to more detailed analysis, including X-ray scans which were completed on February 13, 2023, followed by chemistry laboratory analysis which was completed on February 28, 2023. The results from these analyses revealed the presence of brake fluid past the diaphragm seal, into the brake pressure switch and through the actual wire harness into the pump's fuse circuit. Analysis of the returned components also revealed delamination of the corrosion inhibiting sealant, which allowed slow seepage of the brake fluid past the diaphragm seal.

On March 30, 2023, Navistar reported one potentially related field incident involving a part with alleged heat damage. On April 5, 2023, Navistar provided GM a list of potentially affected vehicle VINs.

On April 6, 2023, GM's Safety Field Action Decision Authority (SFADA) decided to conduct a safety recall. GM's final analysis of the field data, including legal claims, identified a total of twenty-one potentially related complaints, eleven of which alleged a fire, smoke, or flame. GM was provided notice of those events between July 26, 2021, and January 25, 2023.

GM is not aware of any accidents or injuries associated with this condition.

Description of Remedy :

Description of Remedy Program : Dealers will replace the master cylinder pressure sensor. Dealers will also inspect the associated wire harness and replace if necessary. Pursuant to 577.11, GM will provide reimbursement to owners for repairs according to the plan submitted on May 12, 2021.

How Remedy Component Differs from Recalled Component : Replacement pressure sensor assemblies do not incorporate the corrosion inhibitor sealant that was delaminating and causing small fragments of sealer underneath of the diaphragm seal.

Identify How/When Recall Condition was Corrected in Production : On March 21, 2023, Navistar began manufacturing with pressure sensor assemblies that do not incorporate the corrosion inhibitor sealant that was delaminating and causing small fragments of sealer underneath of the diaphragm seal.

Recall Schedule :

Description of Recall Schedule : Dealers will be notified on April 13, 2023. Interim owner notification was mailed on May 10, 2023. GM estimates owner notification of an available remedy will begin June 30, 2023.

Planned Dealer Notification Date : APR 13, 2023 - APR 13, 2023

Planned Owner Notification Date : JUN 30, 2023 - JUN 30, 2023

* NR - Not Reported