

Part 573 Safety Recall Report

21V-103

Manufacturer Name : Spartan Fire, LLC

Submission Date : FEB 22, 2021

NHTSA Recall No. : 21V-103

Manufacturer Recall No. : 21-01



Manufacturer Information :

Manufacturer Name : Spartan Fire, LLC

Address : 1541 Reynolds Road

Charlotte MI 48813

Company phone : 517-588-4700

Population :

Number of potentially involved : 73

Estimated percentage with defect : 100 %

Vehicle Information :

Vehicle 1 : 2019-2021 Spartan Fire Gladiator and MetroStar

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : This recall is based on information supplied by Reyco Granning, the supplier of the Independent Front Suspension and installer of the power steering gear. The IFS models correlate to Spartan part numbers 1170-DD1 and 1180-DD1. The emergency response cab chassis affected by this recall are equipped with Independent Front Suspensions supplied by Reyco Granning.

Production Dates : NOV 27, 2019 - OCT 28, 2020

VIN Range 1 : Begin :

NR

End : NR

Not sequential

Description of Defect :

Description of the Defect : The steering gear mounting bolts may come loose and fall out.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The steering gear mounting bolts could loosen and back out to the point that they may interfere with other steering components, such as a pitman arm. This may cause difficulty in steering or prevent steering to one direction which could increase the risk of a crash.

Description of the Cause : Reyco Granning described the cause as being related to a change in paint material of the steering gearcase mount plates. Inadequate cure time for the paint resulted in the paint to superficially cure but remained in liquid form beneath the outer coat. This resulted in inadequate clamp load allowing the bolts to loosen. Once loose, the bolts will continue to back out due to road vibration.

Identification of Any Warning that can Occur : While the driver may notice an increase in steering effort to hold the vehicle straight, the fasteners may loosen without warning.

Involved Components :

Component Name 1 : NR

Component Description : NR

Component Part Number : NR

Supplier Identification :

Component Manufacturer

Name : Reyco Granning

Address : NR

NR

Country : United States

Chronology :

On November 23, 2020, a dealer reported complaints of loose steering gear box bolts. Spartan identified part numbers and supplier as Reyco Granning. Reyco was asked to assist in identifying the potential scope of the issue and identify cause. On the same day, Spartan issued a stop ship for all Spartan Fire, LLC campuses. On December 1, 2020 Spartan opened a PSR for this issue. Initial investigation by supplier is leading to a paint flow problem from a paint supplier change on the mounting plate implemented 11/20/2019. The supplier changed back to the dip process as of 10/20/2020. At this time, Reyco Granning considered this a non-safety issue. On February 15, 2021, Spartan received Reyco Granning's draft recall and Spartan escalated to REV's executive team. As of February 17, 2021, the determination was made to issue a voluntary recall for this issue.

Description of Remedy :

Description of Remedy Program : The steering gear mounting bolts will be removed and replaced. New bolts will be installed using loctite and a washer then tightened to specification. This will be done at no charge. Vehicles that have exhibited this condition are within the warranty period and all complaints have been addressed through normal warranty.

How Remedy Component Differs The remedy involves replacing the bolts and flat washers that hold the

from Recalled Component : steering gear to the mounting plate with a new bolt and a serrated wedge locking washer. This bolt and washer combination has been tested extensively to ensure that proper clamp load is maintained even if the paint film thickness changes significantly.

Identify How/When Recall Condition was Corrected in Production : At Reyco, Painting of the steering gear mount plates was immediately changed to a paint with a much thinner film thickness that would not have the same post cure flow conditions. This paint was the same that was used for many years prior to the switch with no similar issues reported. Thread locking compound was also added to the manufacturing process to provide an extra level of security. At Spartan, a stop ship in production was issued on 11/23/2020 at all Spartan Fire campuses.

Recall Schedule :

Description of Recall Schedule : The dealers will be notified by March 15, 2021 and the owners a week later.

Planned Dealer Notification Date : MAR 15, 2021 - MAR 19, 2021

Planned Owner Notification Date : MAR 22, 2021 - MAR 26, 2021

* NR - Not Reported