

Part 573 Safety Recall Report

23V-631

Manufacturer Name : Spartan Fire, LLC

Submission Date : OCT 12, 2023

NHTSA Recall No. : 23V-631

Manufacturer Recall No. : 23017



Manufacturer Information :

Manufacturer Name : Spartan Fire, LLC

Address : 1541 Reynolds Road
Charlotte MI 48813

Company phone : 517-588-4700

Population :

Number of potentially involved : 660

Estimated percentage with defect : 4 %

Vehicle Information :

Vehicle 1 : 2021-2024 Spartan Fire Gladiator, Metro Star, FC-94, KME Panther, and KME Predator

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style : OTHER

Power Train : DIESEL

Descriptive Information : The basis for this recall population are emergency response cab chassis equipped with a Wabco inversion valve.

Quantity 1 - Gladiator 2021 model year truck affected.

Quantity 1 - Metro Star 2021 model year truck affected.

Quantity 79 – Gladiator 2022 model year trucks affected.

Quantity 120 - Metro Star 2022 model year trucks affected.

Quantity 47 – FC-94 2022 model year trucks affected.

Quantity 3 – KME Panther 2022 model year trucks affected.

Quantity 75 – Gladiator 2023 model year trucks affected.

Quantity 150 - Metro Star 2023 model year trucks affected.

Quantity 113 – FC-94 2023 model year trucks affected.

Quantity 7 – KME Panther 2023 model year trucks affected.

Quantity 2 – KME Predator 2023 model year trucks affected.

Quantity 1 - Gladiator 2024 model year truck affected.

Quantity 40 - Metro Star 2024 model year trucks affected.

Quantity 21 – FC-94 2024 model year trucks affected.

Production Dates : JUN 01, 2022 -SEP 28, 2023

VIN Range 1 : Begin :

NR

End : NR

☐ Not sequential

Description of Noncompliance :

Description of the Noncompliance : A defect in the inversion valve may cause the park brake engagement to be intermittently delayed. As such, these vehicles may fail to comply with the requirements of Federal Motor Vehicle Safety Standard (FMVSS) number 121, "Air Brake Systems".

FMVSS 1 : 121 - Air brake systems

FMVSS 2 : NR

Description of the Safety Risk : If this condition exists, the park brake may not be applied within 3 seconds, resulting in inadvertent vehicle movement and possible injury.

Description of the Cause : The inversion valve was determined to be out of specification for the piston concentricity due to a machining issue.

Identification of Any Warning that can Occur : The issue would be detectable by not hearing the audible set.

Involved Components :

Component Name 1 : Inversion Valve

Component Description : NR

Component Part Number : Spartan PN: 1617-MM5 / Wabco PN: 9718990020

Supplier Identification :

Component Manufacturer

Name : Wabco / ZF Group

Address : 12001 Tech Center Drive
Livonia Michigan 48150

Country : United States

Chronology :

August 12, 2022 – January 18, 2023 – Internal production intermittent, non-repeatable issues being investigated.

January 19, 2023 – Spartan received notice from Final Stage Manufacturer of repeatable potential delay when engaging the park brake.

January 23 – August 31, 2023 – Spartan worked with Wabco to investigate the issue, created a PSR team, quality alert, as well as conducted a risk assessment. Wabco and their supplier completed various types of inspections and testing on returned parts. (Chronology details will be provided in a separate document).

August 31, 2023 - Reviewed warranty one last time and found recent claims found at the end user. Therefore, the PSR team conducted another risk assessment.

September 5, 2023 – Spartan escalated the issue to REV Group Management.

September 6, 2023 – Stop ship issued.

September 7, 2023 – REV’s senior leadership approved a voluntary recall for this issue.

October 6, 2023 – Spartan identified one additional truck to be added to the population due to a potential non-green marked inversion valve may have been installed onto a chassis cab. The truck was identified through production inspection sheets and had shipped prior to additional inspection for the green mark and replacement, if it was necessary. Adding to the population as a precaution. Additional training and inspection points added into internal Spartan production.

October 12, 2023 – The supplier confirmed the root cause as a concentricity issue of the piston. The supplier manufacturing improvements were put in place in September 2023. The inversion valve assembly with the improved piston began the week of October 9, 2023.

Description of Remedy :

Description of Remedy Program :	The affected vehicles will have the inversion valves inspected for a green mark and replaced with a certified inversion valve as necessary. The vehicles that have been remedied would have been covered through the normal warranty process.
How Remedy Component Differs from Recalled Component :	The certified valve that will replace the recalled component has been through the supplier’s inspection process to identify the part defect and/or it has the improved piston. The certified valve would have a mark on the data tag and/or would have a julian date on the data tag starting in October 2023.
Identify How/When Recall Condition was Corrected in Production :	The supplier implemented a test to identify defects, the test is validated with a red rabbit part (known to be out of spec part). The supplier certified parts were implemented into Spartan production as of June 7, 2023. Corrective action at the supplier was completed in September 2023 and supplier assembly with the improved piston started the week of October 9, 2023.

Recall Schedule :

Description of Recall Schedule :	Spartan to begin Dealer and Final Stage Manufacturer notifications by week of October 23,2023 and owner notifications the week of October 30, 2023.
Planned Dealer Notification Date :	OCT 23, 2023 - OCT 27, 2023
Planned Owner Notification Date :	OCT 30, 2023 - NOV 03, 2023

* NR - Not Reported