

# Part 573 Safety Recall Report

## 24E-011

**Manufacturer Name :** ZF North America, Inc.

**Submission Date :** FEB 09, 2024

**NHTSA Recall No. :** 24E-011

**Manufacturer Recall No. :** NR



### Manufacturer Information :

**Manufacturer Name :** ZF North America, Inc.

**Address :** 12001 Tech Center Drive  
Livonia MI 48150

**Company phone :** 7348552600

### Population :

**Number of potentially involved :** 2,493

**Estimated percentage with defect :** 2 %

### Equipment Information :

**Brand / Trade 1 :** Haldex

**Model :** Inversion Relay Valve

**Part No. :** 9178990020, RKN28032

**Size :** NR

**Function :** See Description

**Descriptive Information :** ZF makes this submission based on the recall of vehicles by Spartan Fire, LLC (23V-631) and DTNA (24V-013) that incorporate certain Haldex inversion relay valves within the park brake actuation air brake system, supplied by ZF. As reported by Spartan Fire and DTNA, air brake systems built with these Haldex inversion valves may cause the park brake engagement on certain vehicles to be intermittently delayed.

The total number of potentially affected parts specified herein is the number of parts ZF supplied to the recalling vehicle manufacturers that were manufactured within the identified suspect production dates, as well as parts sold by ZF on the aftermarket. The relevant ZF part number is 9718990020, supplied to Spartan Fire and DTNA, and RKN28032, supplied to the aftermarket.

The information provided herein is based on information available to ZF at the time of submission and may not include all information available to the recalling vehicle manufacturers.

**Production Dates :** JUN 01, 2022 - SEP 11, 2023

**Description of Noncompliance :**

Description of the Noncompliance : As described by Spartan Fire and DTNA, if this condition exists, an inversion relay valve may cause the park brake engagement to be intermittently delayed, which may prevent the park brake from engaging within 3 seconds of application. Park brakes that fail to engage within 3 seconds of application may fail to comply with the requirements of Federal Motor Vehicle Safety Standard No. 121, Air Brake Systems.

FMVSS 1 : 121 - Air brake systems

FMVSS 2 : NR

Description of the Safety Risk : As reported by Spartan Fire and DTNA, an intermittent delay in park brake engagement could increase the risk of a vehicle rollaway.

Description of the Cause : Based on ZF's investigation, an issue was identified with the piston concentricity in the Haldex inversion relay valves

Identification of Any Warning that can Occur : As described by Spartan Fire and DTNA, in the event of a delayed valve, the vehicle operator may notice the lack of a normal park brake exhaust noise.

**Involved Components :**

Component Name : Inversion Relay Valve

Component Description : NR

Component Part Number : 9718990020 and RKN28032

**Supplier Identification :****Component Manufacturer**

Name : Haldex Brake Product Corporation

Address : 10930 N. Pomona Ave.

Kansas City Missouri 64153

Country : United States

**Chronology :**

See attached chronology

**Description of Remedy :**

Description of Remedy Program : ZF is providing this information report in accordance with 49 CFR 573.3 (f). ZF refers to the vehicle manufacturers' respective filings for details about their respective remedy programs.

FMVSS 121 is a vehicle-level standard that ZF does not certify to. Nevertheless, in light of the decisions made by Spartan Fire and DTNA to conduct non-compliance recalls, and because same or similar parts were sold by ZF in the aftermarket, ZF will conduct a voluntary recall campaign under these circumstances that will cover replacement parts that ZF supplied into the replacement market through independent distributors.

How Remedy Component Differs from Recalled Component : As described by Spartan Fire, the inversion relay valves that will be used to replace the recalled components have either been through the supplier's inspection process to identify the potential defect, or an improved piston machining process was utilized in their manufacture. Remedy inversion relay valves also exhibit a specific marking on the data tag.

Identify How/When Recall Condition was Corrected in Production : Haldex improved clamping on parts to avoid movement during the piston machining process. Haldex has also developed and implemented an offline inspection process.

**Recall Schedule :**

Description of Recall Schedule : ZF refers to the vehicle manufacturers' non-compliance reports for details regarding their respective recall notification schedules. ZF will notify its distributor/dealer customers of ZF's decision to conduct a voluntary recall campaign for replacement parts in accordance with the Planned Dealer Notification dates listed herein. ZF will work with those customers to identify and notify owners of replacement parts.

Planned Dealer Notification Date : APR 09, 2024 - APR 09, 2024

Planned Owner Notification Date : NR - NR

**Purchaser Information :**

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : Spartan Fire, LLC

Address : 1541 Reynolds Road  
Charlotte MI 48813

Country : US

Company Phone : 5175884700

Name : Daimler Trucks North America, Inc.  
Address : 4747 N. Channel Avenue  
Portland OR 97217

Country : US  
Company Phone : 9715019478

Name : Wheelco  
Address : 700 S. Marion Road  
Sioux Falls SD 57106

Country : US  
Company Phone : NR

Name : Zientara Fleet Equipment, Inc.  
Address : 231059 Wellborn Road  
Wausau WI 55403

Country : US  
Company Phone : NR

Name : Vector Mixers, LLC  
Address : 751 E. Business 30  
P.O. Box 928 Columbia City IN 46725

Country : US  
Company Phone : NR

Name : Hollingshead Mixer Company, LLC  
Address : 200 Dekko Drive  
Avilla IN 46710

Country : US  
Company Phone : NR

Name : Crane Carrier (now Battle Motors)  
Address : 1951 Reiser Ave. SE  
New Philadelphia OH 44663

Country : US  
Company Phone : NR

Name : E One  
Address : 4161 SW 13th St.  
Ocala FL 34474

Country : US  
Company Phone : NR

\* NR - Not Reported