OMB Control No.: 2127-0004

Part 573 Safety Recall Report

20E-092

Manufacturer Name: Bendix Commercial Vehicle Systems, LLC

Submission Date: DEC 21, 2020 NHTSA Recall No.: 20E-092 Manufacturer Recall No.: NR



Manufacturer Information:

Manufacturer Name: Bendix Commercial Vehicle Systems,

LLC

Address: 901 Cleveland Street

Elyria OH 44035

Company phone: 440-329-9000

Population:

Number of potentially involved : 1,701 Estimated percentage with defect : 25%

Equipment Information:

Brand / Trade 1: Bendix

Model: SL-4 Part No.: K101993

Size: NR

Function: Pressure Switch

Descriptive Information: SL-4 Stop Light pressure switches manufactured between Dec 1, 2019 and Jan

31, 2020 with improper thread tapping may leak. In some cases the switch might also remain in either the open or closed state. When the SL-4 is used to control the vehicle stop lamps, the stop lamps might not change state increasing the

likelihood of a crash.

Production Dates: DEC 01, 2019 - JAN 31, 2020

Description of Defect:

Description of the Defect: Improperly formed threads do not provide necessary clamp loads to withstand

normal air brake system pressures.

FMVSS 1: NR FMVSS 2: NR

Description of the Safety Risk: When air pressure is supplied to the switch, it may leak. In some cases the

internal electrical contacts might become jammed. If the pressure switch is used to control brake lamps, the result of the jammed contacts might be that the brake lights do not illuminate or that the brake lights constantly remain

illuminated increasing the likelihood of an crash.

Description of the Cause: Insufficient control of the thread tapping operation and functional testing

allowed the defect to be created and not detected.

Identification of Any Warning A leaking switch may make an audible sound that can be detected by the driver

that can Occur: during operation or during pre-trip inspection. The driver may notice the

brake lights on during pre trip inspection. If redundant information is available to the system, a cross-check of the state may indicate to the driver

that the pressure switch signal is implausible.

Involved Components:

Component Name: Bendix SL-4

Component Description: Stop Light Switch

Component Part Number: K101993

Component Name: Bendix SL-4

Component Description: Stop Light Switch

Component Part Number: K101996

Component Name: Bendix SL-4

Component Description: Stop Light Switch

Component Part Number: K108141

Component Name: Bendix SL-4

Component Description: Stop Light Switch

Component Part Number: K108142

Supplier Identification:

Component Manufacturer

Name: Electromags

Address: 134-137, 3rd Cross Street

Nehru Nagar Kottivakkam, Chennai Foreign States 600 041

Country: India

Chronology:

7/9/2020 Oshkosh notified Bendix of a switch separation leading to leak in air system.

All Bendix SL-4 shipments on hold. 7/10/2020

7/14/2020 Preliminary testing performed on current switch stock at Bendix manufacturing and

distribution.

7/14/2020 Determined certification test procedure to ship production to customers.

8/5/2020 Inventory certified with test and adding blue dot.

8/7/2020 Bendix opens investigation into potential failure modes of the issue reported by Oshkosh.

Oshkosh recall notice 20V499, issued September 6th. 9/6/2020

8/72020 – 11/23/2020 Bendix investigation isolates the thread tapping operation as the sole cause of parts separation. A series of experiments are performed designed to evaluate the effects of process variation on the assembly integrity through cycles of laboratory tests. Additional potential failure mode identified through laboratory tests: electrical contacts might become jammed.

12/14/2020 Bendix product integrity committee recommendation to issue 573 equipment defect report is agreed and approved.

Description of Remedy:

Description of Remedy Program: The suspect switches will be replaced with parts without the defect.

How Remedy Component Differs All parts have a date code label that is easily readable. Parts with the date from Recalled Component: range of Dec 1, 2019 through Jan 31, 2020 will be replaced with parts

from a later build range that do not have the potential defect.

Identify How/When Recall Condition The process controls were improved to eliminate potential improper was Corrected in Production: tapping operation. The functional test was improved to detect this specific

leak and the conditions that were necessary to enable the leak.

Recall Schedule:

Description of Recall Schedule: OEM Customers will be notified by 1/31/2021 while Dealer/Distributor

and Owners will be notified by the indicated schedule.

Planned Dealer Notification Date: FEB 01, 2021 - FEB 18, 2021 Planned Owner Notification Date: FEB 01, 2021 - FEB 18, 2021

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: Oshkosh Corp Address: 2737 Harrison St

PO Box 2566 Oshkosh WI 54903

Country: US

Company Phone: 9202359151

Name: Hines Specialty Vehicles Group

Address: 1951 Reiser Ave SE

New Philadelphia OH 44663

Country: US

Company Phone: 8775462537

Name: Paccar Parts Division Address: 405 Houser Way North

Renton WA 98057

Country: US Company Phone: NR

Name: PAI Industries Inc

Address: 950 Northbrook Parkway

Suwanee GA 30024

Country: US Company Phone: NR

> Name: Freightliner Address: PO Box 3849

> > Portland OR 97208

Country: US Company Phone: NR

Name : Newbegin Enterprises Inc

Address: 686 Industrial Park Rd

Piney Flats TN 37686

Country: US Company Phone: NR

Name: Atap Inc

Address: 130 Industry Way

Eastaboga AL 36260

Country: US Company Phone: NR Name: Brake & Clutch Supply Inc

Address: 2930 6th Ave South

Seattle WA 98134

Country: US

Company Phone: 2066225655

Name: Bert Williams & Sons Inc

Address: 3032 Sonoma Blvd

Vallejo CA 94590

Country: US

Company Phone: NR

Name: Knorr-Bremse CDC FG Freienbrink

Address: Kiefernstrasse 5

Grunheide (Mark) 00 15537

Country: DE

Company Phone: NR

^{*} NR - Not Reported