# Part 573 Safety Recall Report

Manufacturer Name :Xos, Inc.Submission Date :NOV 10, 2023NHTSA Recall No. :23V-760Manufacturer Recall No. :REC 003-23

### **Manufacturer Information :**

Manufacturer Name : Xos, Inc. Address : 3550 Tyburn St. Los Angeles CA 90065 Company phone : 316-1890

# Vehicle Information :

Vehicle 1:	2021-2022 Xos	SV05		
Vehicle Type :	BUSES, MEDIUM	I & HEAVY VEH	ICLES	
Body Style :	OTHER			
Power Train :	NR			
Descriptive Information :	The recall popul differ from othe specified produc parking brake th population inclu	ation was deter r products that ction period, ven nat may malfund ides 222 Xos SV	rmined by production records. Th were not included in the recall be hicles may have been produced w ction under certain circumstances 05 vehicles as potentially involve	e recalled products cause, during the ith an electronic s. The recall d vehicles.
Production Dates :	DEC 23, 2021 - M	AY 23, 2023		
VIN Range 1:	Begin :	NR	End: NR	☐ Not sequential
Vehicle 2 : Vehicle Type : Body Style : Power Train : Descriptive Information :	2021-2021 Xos BUSES, MEDIUM OTHER NR The recall popul differ from othe specified produc parking brake th population inclu	SA01 I & HEAVY VEH ation was deter r products that ction period, ven that may malfund ides twenty (20	ICLES rmined by production records. Th were not included in the recall be hicles may have been produced w ction under certain circumstances ) Xos SA01 vehicles as potentially	e recalled products cause, during the ith an electronic s. The recall involved vehicles.
Production Dates :	FEB 21, 2022 - N	IOV 04, 2022		
VIN Range 1:	Begin :	NR	End: NR	Not sequential



Number of potentially involved : 242 Estimated percentage with defect : 100 %

**Population :** 

# 23V-760

# **Description of Defect :**

Description of the Defect :	Excessive friction between a bolt and a bracket on the actuator and piston sides of the electronic parking brake (EPB) system may result in one or both of the nuts holding the hardware to the EPB bracket to come loose, causing the electronic parking brake system to lose calibration and malfunction.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	The malfunction may cause the EPB not to engage, or to fail to disengage.
	If the EPB cannot be engaged, and the Manual Park Brake warning is ignored, and the vehicle is parked on a grade without being placed into "Park," the vehicle could rollaway, increasing the risk of a crash.
	If the EPB cannot be disengaged, the vehicle may be immobilized.
Description of the Cause :	The design of the electronic braking system was incorrect for the application.
Identification of Any Warning that can Occur :	If the EPB cannot be engaged, the driver receives a warning that the EPB cannot be engaged and that the manual park brake must be engaged to secure the vehicle.
	If the EPB cannot be disengaged, the driver receives a stop fault alerting the driver that the vehicle is immobilized and a service light will illuminate on the dash.

# **Involved Components :**

Component Name 1:	Washer
Component Description :	Washer from Pivot Bolt
Component Part Number :	HD40-HH-M0031

Component Name 2 :	Bolt
Component Description :	NR
Component Part Number :	HD20-HH-M0017

Component Name 3 :	Nut
Component Description :	NR
Component Part Number :	HD30-HH-M0048

The information contained in this report was submitted pursuant to 49 CFR §573

# **Supplier Identification :**

**Component Manufacturer** 

Name : NR Address : NR NR Country : NR

### **Chronology**:

In early 2022, Xos engineering initiated an investigation into reports of EPB malfunction involving the subject vehicles. In February 2023, the engineering team concluded that excessive friction between a bolt and a bracket on the actuator and piston sides of the EPB system may result in one or both of the nuts holding the hardware to the EPB bracket to come loose, causing the EPB system to lose calibration and malfunction. Subsequently, Xos engineering conducted additional analysis on potentially impacted vehicles. On November 6, 2023 the topic was presented to Xos's Product Safety Committee. Based upon the information presented, the Product Safety Committee decided to initiate a recall to address this condition. To date, there have been at least 45 reports related to this issue, with no reports of accidents or injuries related to this condition.

#### **Description of Remedy :**

Description of Remedy Program :	The affected hardware on the impacted vehicles will be replaced at no cost to customers. All of the subject vehicles remain under the manufacturer's warranty. Therefore, pursuant to 49 CFR 577.11(e), Xos requests an exemption from the reimbursement plan requirements.
How Remedy Component Differs from Recalled Component :	The recall remedy component can be distinguished from the recalled component because the design of the remedy component will not create excessive friction in the EPB system. In addition, the vehicle software system will be updated to include a warning that displays instructing the driver to engage the manual parking brake any time the vehicle is placed into park, instead of only displaying when the EPB fails to engage.
Identify How/When Recall Condition was Corrected in Production :	Vehicles shipped after May 24, 2023 were produced with an EPB system that is not impacted by this recall.

#### **Recall Schedule :**

Description of Recall Schedule :	Customers and Dealers will be notified of the pending voluntary recall campaign beginning in November 2023. Copies of communications will	
	be provided when available.	
Planned Dealer Notification Date :	NOV 20, 2023 - NOV 20, 2023	
Planned Owner Notification Date :	DEC 11, 2023 <sup>-</sup> DEC 11, 2023	

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\* NR - Not Reported

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