

Part 573 Safety Recall Report

22E-011

Manufacturer Name : Key Safety Systems, Inc. - (DBA Joyson)

Submission Date : APR 21, 2022

NHTSA Recall No. : 22E-011

Manufacturer Recall No. : QN24509



Manufacturer Information :

Manufacturer Name : Key Safety Systems, Inc. - (DBA Joyson)

Address : 2025 Harmon Road
Auburn Hills MI 48326

Company phone : 475 6111

Population :

Number of potentially involved : 15

Estimated percentage with defect : 100 %

Equipment Information :

Brand / Trade 1 : Curtain Airbag inflator

Model : ACI-2E

Part No. : 2557843AA 2553433AC

Size : NR

Function : Restraint

Descriptive Information : The ACI-2e is a Hybrid inflator manufactured by a Joyson Safety System inflator facility. On February 8, 2022, in a quality check performed in the ordinary course, an inflator was discovered with a missing component. Further review of production data prompted by this discovery identified a number of previously produced inflators which may contain duplicate or missing components.

Production Dates : JAN 01, 2021 - FEB 08, 2022

Description of Defect :

Description of the Defect : The subject inflators may have been released with duplicate or missing components, with a potential negative impact on restraint performance in the event of a crash

FMVSS 1 : 214 - Side impact protection

FMVSS 2 : NR

Description of the Safety Risk : Reduction in the airbag's restraint performance may increase the risk of occupant injury in a crash

Description of the Cause : 1.) It was discovered that if the production process was interrupted at a specific point, vacuum could be lost resulting in release of a subcomponent, leading either to the absence of that component or, in some instances, the introduction of a second iteration of that component.

2.) The vision system intended to detect the presence or absence of

relevant internal components failed to identify the issue, allowing the inflator to complete assembly with missing components.

Identification of Any Warning that can Occur : The condition addressed is not apparent in advance of airbag deployment (except through a review of manufacturing data).

Involved Components :

Component Name : ACI-2e Inflator

Component Description : Hybrid Curtain Airbag Inflator

Component Part Number : 2557843 AA 2553433AC

Supplier Identification :

Component Manufacturer

Name : Joyson Safety System

Address : 2500 Innovation Dr
Auburn Hills Michigan 48326

Country : United States

Chronology :

On February 7th, 2022 the LVDT sensor tip used to verify propellant fill height was discovered to be missing by a routine line maintenance check. By review of production data (specifically, component weight data at relevant points in the assembly process), inflators were identified that may contain duplicate or missing components. On February 10th, 2022, it was determined through simulation testing that this could have an adverse impact on the field performance of affected components. On February 17, 2022, it was confirmed that affected components were incorporated in vehicles in the field.

Description of Remedy :

Description of Remedy Program : JSS will provide a new Curtain Airbag module to OEMs as necessary to replace suspect units

How Remedy Component Differs from Recalled Component : New parts will be made on the production line after the PLC updates have been made

Identify How/When Recall Condition was Corrected in Production : The PLC Program was changed on February 10, 2022 to allow specific production stations to reject components if the station cycle is interrupted at any time before the machine process has completed. Stations were tested to ensure parts were rejected by introducing different scenarios that would simulate a process interruption. Also, additional weight validation was added to ensure detection. The assembly verification camera for the relevant station was re-trained to improve the detection of missing components.

Recall Schedule :

Description of Recall Schedule : Recall managed by OEM's
JSS Informed the affected OEM's of action to submit a Defect Investigation report with NHTSA and were provided a copy of the equipment filing.

Planned Dealer Notification Date : NR - NR

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 : Tesla, Inc.
Address : 3500 Deer Creek Road
Palo Alto CA 94304
Country : US
Company Phone : NR

* NR - Not Reported