

# Part 573 Safety Recall Report

# 21E-080

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

**Submission Date :** AUG 25, 2021

**NHTSA Recall No. :** 21E-080

**Manufacturer Recall No. :** QN10584, QN20023



## 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 :** 622,392

**Estimated percentage with defect :** 1 %

## Equipment Information :

**Brand / Trade 1 :** Curtain Airbag Inflator

**Model :** HPH-A

**Part No. :** 2033349 thru 54

**Size :** 68161579-81 6818432624-27

**Function :** Occupant restra

**Descriptive Information :** During the referenced production dates, moisture may have been introduced into the pressure vessel of the subject inflators during the manufacturing process. All inflators identified as potentially subject to this condition have been previously recalled by either General Motors (Recalls No. 20V736 and 21V504) or Stellantis (Recall No. 21V632 and 21E074).

**Production Dates :** MAR 27, 2015 - SEP 28, 2015

## Description of Defect :

**Description of the Defect :** Where moisture is introduced in the manufacturing process, corrosion may result. Over time, corrosion inside the pressure vessel combined with pressure and temperature cycling may weaken the vessel's strength causing it to burst or rupture, releasing the stored gas within.

**FMVSS 1 :** NR

**FMVSS 2 :** NR

**Description of the Safety Risk :** This condition could result in the inflation gas being released into the passenger compartment rather than into the airbag cushion. It is also possible that fragments or components of the inflator will be forcibly detached creating a risk of injury to an occupant. To date, all reported incidents have occurred in unoccupied vehicles parked during periods of high temperature

**Description of the Cause :** As part of the manufacturing process, inflators are tested for strength and integrity by the introduction of pressurized air (air proofing) prior to injection of the stored gas which enables airbag inflation. During the relevant period, due to an inadequate response to equipment failure, the air proofing system was found to be susceptible to the introduction of moisture into inflators during the production process.

**Identification of Any Warning that can Occur :** It is expected that this condition would manifest without warning.

## Involved Components :

**Component Name :** HPH-A inflator

**Component Description :** Stored Gas Curtain Airbag Inflator

**Component Part Number :** 2033349,2033350, 2033351, 2033352,2033353,2033354,2033350

**Component Name :** HPH-A inflator

**Component Description :** Stored Gas Curtain Airbag Inflator

**Component Part Number :** 68161579AJ,68161578AJ, 68161580AI, 68161581AI, 68161581AK,,68161580AK,,68184326AH,68184327AH,

**Component Name :** HPH-A inflator

**Component Description :** Stored Gas Curtain Airbag Inflator

**Component Part Number :** 68184324AH, 68184325AH, 68161580AJ, 68161581AJ

## Supplier Identification :

### Component Manufacturer

**Name :** Key Safety Systems De Mexico

**Address :** Parque Industrial Valle Hermoso 89

Lotes 4 y 5 S/N Cd, Valle Hermoso, Tamaulipas Foreign States CP. 87500

**Country :** Mexico

## Chronology :

2019, an HPH-A inflator in a GM pickup truck parked in Saudi Arabia experienced the opening of the swaged end of the pressure vessel. The end cap was detached and could not be located. Metallurgical analysis suggested that corrosion and intergranular cracking led to the end cap weakening to the point of compromise. No corrosion or Intergranular cracking was found in several parts manufactured within one day of the event part. It was concluded there was an unknown special cause allowed the introduction of moisture into this part. In June of 2020, a second end cap separation occurred on a GM pickup truck in Texas. The component exhibited the same corrosion and intergranular cracking as the first event inflator, and GM initiated recall 20V736 to replace inflators produced the same day as the parts involved in the field incidents. In June of 2021, General Motors subsequently became aware of three additional incidents in succession (June 15, June 21, and June 22, 2021). On June 24, 2021, General Motors initiated a recall (21V504). The scope of that recall was based on investigation which identified an equipment failure in March of 2015 and corrective action which was effective no later than September 28, 2015, when helium proofing was implemented in the relevant manufacturing facility. JSS and Stellantis were simultaneously investigating whether parts manufactured during the same production period and supplied to Stellantis were subject to the same failure mode. On July 8, 2021, Stellantis was notified of an incident in Florida in a Stellantis vehicle with an inflator manufactured in the same time period, which was subsequently determined to exhibit the same failure mode. On August 13, 2021, Stellantis initiated a recall of HPH-A inflators in the same product range ( Recall #21V632 and 21E074) . Investigation continues regarding whether all production within the specified range is subject to the identified defect.

## Description of Remedy :

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

How Remedy Component Differs from Recalled Component : The new parts will be pressure tested using Helium with safeguards to assure the absence of moisture contamination.

Identify How/When Recall Condition was Corrected in Production : The factory switched away from pressure testing the vessels with air in favor of commercially controlled Dry Helium in September of 2015

## Recall Schedule :

Description of Recall Schedule : The Affected OEMs are in control of the notification/recall Schedule. GM and Stellantis were made aware of the field ruptures in Mid June, 2021

Planned Dealer Notification Date : SEP 01, 2021 - SEP 01, 2021

Planned Owner Notification Date : SEP 01, 2021 - SEP 01, 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 : General Motors LLC

Address : GM Global Tech Center

29247 Louis Chevrolet Rd, Floor 2 Warren MI 48093

Country : US

Company Phone : NR

Name : FCA US, LLC

Address : 1000 Chrysler Drive

Auburn Hills MI 48326

Country : US

Company Phone : NR

\* NR - Not Reported