Part 573 Safety Recall Report 22V-010

Manufacturer Name : Seagrave Fire Apparatus, LLC
Submission Date : JAN 13, 2022
NHTSA Recall No. : 22V-010
Manufacturer Recall No. : NR

Manufacturer Information :

Manufacturer Name : Seagrave Fire Apparatus, LLC
Address : 105 East 12th Street
Clintonville WI 54929
Company phone : 715-823-2141

Population :

Number of potentially involved : 409
Estimated percentage with defect : 10 %

Vehicle Information :

Vehicle 1 : 2011-2021 Seagrave Maurauder/Capitol
Vehicle Type :
Body Style :
Power Train : NR
Descriptive Information : Certain Seagrave Capitol and Marauder Vehicles built with a similar design for the frame crossmember that is located behind the transmission. The trucks produced during the subject timeframe that are not involved in this recall do not contain this crossmember design.

Production Dates : DEC 01, 2011 - DEC 31, 2021
VIN Range 1 : Begin : NR End : NR ☐ Not sequential

Description of Defect :

Description of the Defect : Under certain extreme conditions, the mounting plate of the crossmember may fatigue and eventually crack.
FMVSS 1 : NR
FMVSS 2 : NR
Description of the Safety Risk : The presence of cracking in this crossmember may lead to popping or banging noises when turning or driving over rough roads. These noises could potentially startle or distract the vehicles driver and jeopardize the safe operation of the vehicle.
Description of the Cause : The potential defect is caused by repeated high intensity shocks being induced into a single front tire, such as when hitting potholes or road curbing at higher speeds. This motion can cause the crossmember to be subject to higher tension loads than it was originally designed
Identification of Any Warning Light popping or creaking noises may be noticed during turns or when driving over rough roads. These noises could eventually get louder creating a driving

that can Occur : distraction.

Involved Components :

Component Name 1 : Frame Crossmember
Component Description : Frame Crossmember Behind Transmission
Component Part Number : E1442501

Component Name 2 : Frame Crossmember
Component Description : Frame Crossmember Behind Transmission
Component Part Number : E1492721

Component Name 3 : Frame Crossmember
Component Description : Frame Crossmember Behind Transmission
Component Part Number : E1443006

Component Name 4 : Frame Crossmember
Component Description : Frame Crossmember Behind Transmission
Component Part Number : E1451872

Component Name 5 : Frame Crossmember
Component Description : Frame Crossmember Behind Transmission
Component Part Number : E1451660

Component Name 6 : Frame Crossmember
Component Description : Frame Crossmember Behind Transmission
Component Part Number : E1460471

Component Name 7 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1478040

Component Name 8 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1484007

Component Name 9 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1464487

Component Name 10 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1461361

Component Name 11 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E146541

Component Name 12 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1454374

Component Name 13 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1451873

Component Name 14 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1487848

Component Name 15 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1494069

Component Name 16 :	Frame Crossmember
Component Description :	Frame Crossmember Behind Transmission
Component Part Number :	E1492727

Supplier Identification :

Component Manufacturer

Name :	Seagrave
Address :	105 E. 12th Street Clintonville Wisconsin 54929
Country :	United States

Chronology :

March 1, 2021- Seagrave was notified by a customer about 3 vehicles in their fleet that had cracked crossmembers noted during a routine annual inspection. Seagrave began an investigation that included obtaining and inspecting parts returned from the field as well as analyzing the specific operating conditions and uses to determine the root cause of the failures. March 23, 2021- Seagrave was notified of 3 additional cracked crossmembers from the same customer after a full fleet inspection was completed as part of the investigation into the report. July – September 2021 – Seagrave received 4 additional reports of cracked crossmembers unrelated to the original report. This prompted the escalation of the issue into a Seagrave Service and Engineering (SSE) Project for further investigation. September – November 2021 – The SSE Team initiated an investigation into the reported failures. This investigation included a product history review that identified 1 more failure that was reported in 2018, further defective part analyzation, a part manufacturing process review, and part design verification with Finite Element Analysis (FEA) computer simulations that were used in determining the root cause of the failures as well as to develop and evaluate the potential corrective action. October-November 2021- The SSE Team developed a new crossmember design to replace the suspect design and submitted them to 3rd party design simulations for validation. Simultaneously, the SSE

Team submitted alternative designs for a potential field repair to 3rd party design simulations for validation. December 2021- Seagrave escalated the issue through its Seagrave Product Safety Committee process. January 6, 2022 - Based upon the results of the investigation, the Seagrave Product Safety Committee decided to conduct a safety campaign to address this condition. To date, there have been no reports of a crash caused by this condition.

Description of Remedy :

Description of Remedy Program :	The affected vehicles will have the suspect crossmember removed and a modified crossmember installed. The total repair time is estimated at 5 hours.
How Remedy Component Differs from Recalled Component :	The remedy crossmember is made with thicker end plates and strategically located gusseting that eliminates the high stress area that was found during the FEA computer modelling that was conducted during the investigation.
Identify How/When Recall Condition was Corrected in Production :	In December 2021 the updated crossmember designs were implemented into production.

Recall Schedule :

Description of Recall Schedule :	Seagrave will send out Owner and Dealer Notifications no later then 03/14/2022.
Planned Dealer Notification Date :	MAR 14, 2022 - MAR 14, 2022
Planned Owner Notification Date :	MAR 14, 2022 - MAR 14, 2022

* NR - Not Reported