

Part 573 Safety Recall Report

21E-012

Manufacturer Name : Reyco Granning

Submission Date : FEB 16, 2021

NHTSA Recall No. : 21E-012

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Reyco Granning

Address : 1205 Industrial Park Drive

Mt. Vernon MO 65712

Company phone : 4662178

Population :

Number of potentially involved : 109

Estimated percentage with defect : 10 %

Equipment Information :

Brand / Trade 1 : Reyco Granning

Model : IFS-FT

Part No. : IFS-FT

Size : 20,000 lbs and 24,000 lbs

Function : Steer Suspen

Descriptive Information : Some IFS-FT units may have steering gears that the fasteners may loosen and lose clamp load between the cradle and steering gear. These units were manufactured between 11/27/2019 thru 10/28/2020 using a different type of paint on the steering gearcase mount plates. This paint could flow and relax over time causing the bolts to lose clamp load and loosen

Production Dates : NOV 27, 2019 - OCT 28, 2020

Description of Defect :

Description of the Defect : Loose steering gear mount bolts on FireTruck Independent Front Suspensions manufactured by Reyco Granning LLC.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The steering gear mounting fasteners could loosen and back out to the point that they may interfere with other steering components, such as a pitman arm. This may cause difficulty in steering or prevent steering to one direction which could increase the risk of a crash.

Description of the Cause : A change was made to the type of paint used on the steering gearcase mount plates. The new paint can continue to flow and relax over time, despite appearing to be cured. As the paint flows out from under the bolt head and washer, the film thickness of the paint decreases. This flowing action allows the bolt stretch that was gained during the torqueing procedure to relax and clamp

load is lost. Once loose, the bolts will continue to back out due to road vibration.

Identification of Any Warning that can Occur : The driver may notice a change in steering feel, primarily related to vagueness, difficulty in holding a straight line, or vehicle wandering, the fasteners may also loosen without warning.

Involved Components :

Component Name : NR

Component Description : NR

Component Part Number : NR

Supplier Identification :

Component Manufacturer

Name : NR

Address : NR

NR

Country : NR

Chronology :

In an effort to improve corrosion resistance, it was decided to switch paint types on a number of suspension components around November 2019. This change went into production on 11/27/19 and the new paint was Tectyl 3335. Initial testing showed that there could be a problem with the new paint flowing for an extended period of time after application and that bolted joints where a relatively short fastener was used without a locking feature were particularly susceptible to losing clamp load. Reyco Granning Engineering detailed which components could and could not be painted with the new paint due to this concern. Unfortunately, a miscommunication occurred and the steering gear mount plates continued to be painted with the new paint. Around September 2020, the first reports of steering gears being loose started to come in from end use customers. Testing was restarted immediately from a number of different avenues within Reyco Granning in order to determine the root cause of the failure. At the end of October 2020 it was determined that the root cause was the paint and how it continued to flow. Painting of the steering gear mount plates was immediately changed to a paint with a much thinner film thickness that would not have the same post cure flow conditions. Production of plates painted with the Tectyl 3335 paint ended on 10-28-2020. Further work continued over the next couple of months in order to determine the severity of the failure and possible remedies. Customers were notified at the beginning of the year in order to facilitate discussion and direction on remediation. At the end of January it was decided that this rose to the level of a Safety Recall and the appropriate steps need to be

taken.

Description of Remedy :

Description of Remedy Program : Reyco Granning will notify all customers of this action and provide serial numbers of affected product to assist these manufacturers in identifying potential affected vehicles. Reyco Granning will implement an inspection and rework procedure.

How Remedy Component Differs from Recalled Component : The remedy involves replacing the bolts and flat washers that hold the steering gear to the mounting plate with a new bolt and a serrated wedge locking washer. This bolt and washer combination has been tested extensively to ensure that proper clamp load is maintained even if the paint film thickness changes significantly.

Identify How/When Recall Condition was Corrected in Production : Painting of the steering gear mount plates was immediately changed to a paint with a much thinner film thickness that would not have the same post cure flow conditions. This paint was the same that was used for many years prior to the switch with no similar issues reported. Thread locking compound was also added to the manufacturing process to provide an extra level of security.

Recall Schedule :

Description of Recall Schedule : Notification of the Recall was sent to the chassis manufacturer on 02-04-2021

Planned Dealer Notification Date : FEB 16, 2021 - MAR 31, 2021

Planned Owner Notification Date : FEB 16, 2021 - MAR 31, 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 : Spartan ER

Address : 1541 Reynolds Rd
Charlotte MI 48813

Country : US

Company Phone : 5175884700

Name : E-One Inc
Address : 1601 SW 37th Ave
Ocala FL 34474
Country : US
Company Phone : 3522371122

Name : Rosenbauer Motors, LLC
Address : PO Box 549
Wyoming MN 55092
Country : US
Company Phone : 6514621000

Name : Ferrara Fire Apparatus
Address : 27855 James Chapel Rd N
Holden LA 70744
Country : US
Company Phone : 2255677100

* NR - Not Reported