Part 573 Safety Recall Report 24E-056

Manufacturer Name : Reyco Granning
Submission Date : AUG 02, 2024
NHTSA Recall No. : 24E-056
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 : 58
Estimated percentage with defect : 10 %

Equipment Information :

Brand / Trade 1 : Reyco Granning / FT IFS
Model : IFS20FT, IFS22FT, IFS24FT
Part No. : 710244-01
Size : HHB 7/8-9 x 9 Gr9
Function : LCA Retention
Descriptive Information : Defect occurred in a single lot of bolts. The earliest delivery of the bolts is associated with the beginning of the population and the end of the population coincides with the last unit made at the time of discovery.

Non-conforming products are Marked "HK" on the head of the fastener. Products within the time frame that are not part of the population are are marked with "FNL" or "L".

58 units have been identified via images taken at the time of manufacture.

Production Dates : JUL 10, 2023 - APR 23, 2024

Description of Defect :

Description of the Defect : The independent front suspension (IFS) assembly was built with four bolts that may exhibit hydrogen embrittlement. There is a resulting potential for the heads of these bolts to pop off during alignment or retorque procedures. This may result in separation of the fastener head at a high velocity which could cause injury to any persons in the vicinity when the separation occurs.

FMVSS 1 : NR
FMVSS 2 : NR

Description of the Safety Risk :	In the case where the listed defect results in a failure of the bolt, separation of the fastener head from the main bolt body can result in injury.
Description of the Cause :	Bolts were stripped of their original coating and re-plated with zinc, resulting in hydrogen embrittlement within a portion of the affected bolt lot.
Identification of Any Warning that can Occur :	If hydrogen embrittlement is present within a fastener and the joint is re-torqued during an alignment where joint clamp load is higher than that produced during original assembly, the fastener head could separate from the main bolt body without warning.

Involved Components :

Component Name :	LCA to cradle mounting hardware
Component Description :	HHB 7/8-9 X 9 9 ZN
Component Part Number :	710244-01

Supplier Identification :

Component Manufacturer

Name :	Fastenal
Address :	2001 Theurer Blvd. Winona Minnesota 55987
Country :	United States

Chronology :

Initial bolt failure - March 6th 2024 Bolt repaired at the time. Over the course of the next month 2 more failed. April 24th Spartan motors discussed issue with their Fastenal rep. It was noted by the Fastenal representative that there was the possibility of hydrogen embrittlement. Parts sent for testing by Fastenal. Reyco sent parts for testing on March 27 (third party) quote received 4/18/2024 parts sent for testing. Test report received (Third party) 5/2/2024 noting failed parts did have hydrogen embrittlement. Normally, parts with HE fail within 24 to 48 hours - no trucks that had been sitting failed in that time frame. Testing was done to determine why certain trucks failed outside of this window, It was determined that the failures only occurred post alignment activity where torques higher than the original installation torque were achieved. Decision to move forward with recall was based on discussions between Spartan Fire and Reyco, where a concern was raised regarding safety of the individual(s) under the vehicle, during alignment procedures. Decision to move forward was finalized week of June 24th.

Description of Remedy :

Description of Remedy Program :	Target population has been defined down to the individual serial numbers. This was accomplished by reviewing images of the FT IFS units produced (Pictures are taken as part of the normal QC activities surrounding the build up of Reyco IFS units). Serial numbers for units with "HK" bolt head marking were identified. A TSB has been created that defines the bolt replacement process, including marking methodologies etc. that need to be employed so that vehicle alignment remains unaffected. Removal of bolts is not an safety issue as failure only occurs post tightening of the fasteners. Reyco will be writing letters to each of the manufacturers listed that used the product describing the issue etc. A copy of the TSB will be sent as well. 2 hours will be allowed for labor, bolt kits will be offered at no charge with a token "tracking fee" any additional fees and labor rates will be negotiated with each of the manufacturers involved. A reserve account has been set up to cover costs. Plan for reimbursement - No reimbursement statement is required because parts are under warranty.
How Remedy Component Differs from Recalled Component :	All fasteners marked with an "HK" on the head are suspect (Not all are bad). If they were built within the timeframe described and they have the "HK" marking the fasteners will be replaced with fasteners marked with "L9". (HK fasteners were stripped and re-plated, "L9" fasteners went through the normal manufacturing process).
Identify How/When Recall Condition was Corrected in Production :	On 4/23/2024 all HK bolts were quarantined and removed from production. Fastenal delivered brand "L9" marked fasteners that day that were immediately used in production.

Recall Schedule :

Description of Recall Schedule :	Letters will be written the week of July 8th and will go out shortly thereafter. Note we will be notifying the Chassis Manufacturers above.
Planned Dealer Notification Date :	JUL 08, 2024 - JUL 19, 2024
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 :	Spartan Fire LLC
Address :	1541 Reynolds Road Charlotte MI 48813
Country :	US
Company Phone :	5175884136

Name :	E-One
Address :	3611 SW 20th Street
	Ocala FL 34474
Country :	US
Company Phone :	3525728518

Name :	HME
Address :	1950 Byron Center Ave SW
	Wyoming MI 49519
Country :	US
Company Phone :	6165341463

Name :	Rosenbauer Motors LLC
Address :	5190 260th St
	Wyoming MN 55092
Country :	US
Company Phone :	6514621000

Name :	Metro Fire Apparatus Specialist
Address :	17350 Tomball Pkwy
	Houston TX 77064
Country :	US
Company Phone :	7136920911

* NR - Not Reported