

Part 573 Safety Recall Report

19E-042

Manufacturer Name : Specialty Manufacturing Co.

Submission Date : AUG 05, 2019

NHTSA Recall No. : 19E-042

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : Specialty Manufacturing Co.

Address : 13501 South Ridge Drive

Charlotte NC 28273

Company phone : 800-951-7867

Population :

Number of potentially involved : 18,550

Estimated percentage with defect : 20 %

Equipment Information :

Brand / Trade 1 : Prolo

Model : Prolo Roof Hatch

Part No. : 92XX-XXXXX Series

Size : 24" x 24"

Function : Roof Hatch

Descriptive Information : Fence posts for the population were determined by production dates of the roof hatch assemblies along with receipt dates of suspect components from supplier. Units not included in the recall were assembled using different production batches of the cast zinc external release handle. The suspect production batch/component lot was verified by inspection and testing of warehoused stock corresponding to the production/receipt dates mentioned above as well as units produced before and after the suspect date range. An estimated 18,550 hatches were assembled using the suspect handles. This covers all 92XX-XXXXX Series Series glass hatches produced between 8/1/18 and 5/20/19

Production Dates : AUG 01, 2018 - MAY 20, 2019

Description of Defect :

Description of the Defect : Prolo roof hatches (emergency exits) utilize a die cast zinc handle for the external release handle. Certain production lots of these cast handles were found to contain a higher than allowed/specified level of porosity or voids. The excess porosity and voids can create failure points in the handle leading to breakage under reasonable use. Presence of voids/porosity can be determined by part weight but this does not guarantee failure of the part - location and concentration of the defects are key to the failure mode. The estimated 20% covers suspect components that show a low part weight (indicates the presence of porosity and voids) but does indicate failure rate.

FMVSS 1 : 217 - Bus emergency exits and window retention and release

FMVSS 2 : NR

Description of the Safety Risk : Failure of the external release handle will prevent the hatch release mechanism from being actuated from outside the vehicle. The hatch can still be opened from the outside by venting the hatch and actuating the inside release handle however this operation is not intuitive and not detailed in the required instructions located on the hatch. Failure of the external release handle does not prevent actuation of the release mechanism from inside the vehicle.

Description of the Cause : The defects were a result of casting process inconsistencies at component supplier. The casting mold temperature ran outside of spec in one section of the mold. This caused the injected zinc to cool too rapidly creating porosity and voids in the stem of the cast external release handle.

Identification of Any Warning that can Occur : None.

Supplier Identification :

Component Manufacturer

Name : Specialty Manufacturing Co.

Address : 13501 South Ridge Drive
Charlotte NORTH CAROLINA 28273

Country : United States

Chronology :

2/22/19 - First reported failure of a handle at OEM site. No information provided about circumstances of failure provided (abuse, accidental damage, etc.). Failure was noted but considered an outlier (no additional failures reported at time).

5/20/19 - Second reported failure of a handle at second OEM site. Failure occurred during audit of vehicle before delivery. All stock quarantined and sorted.

5/21/19 - All current stock replaced with sorted product as an immediate containment action pending investigation.

5/22/19 - Investigation of failed parts begins, starting with quarantined stock pulled from production.

6/7/19 - Analysis of quarantined parts shows that approx. 20% of the die cast Prolo hatch handles are under weight (out of spec) indicating the presence of voids and porosity in the parts.

6/17/19 - Testing of low weight handles completed. Testing shows that presence of voids and porosity increased the chances of handle failure but does not guarantee failure.

6/21/19 - 573 opened w/NHTSA for the handle defect.

Description of Remedy :

Description of Remedy Program : Specialty Manufacturing Co. will supply replacement hatch handles to all affected customers. Replacement of the lid involves removal of one screw, removal of existing hatch handle, and re-installation of new handle. Manufacturer will reimburse customers \$25 for labor for each hatch handle replaced.

How Remedy Component Differs from Recalled Component : All emergency escape Prolo roof hatch handles with production dates corresponding to the listed dates, part numbers 92XX-XXXXX will be replaced with new handles from certified in-spec production.

Identify How/When Recall Condition was Corrected in Production : Implementation of new control plan by supplier to ensure casting machine thermal parameters are in spec which will prevent the formation of porosity and voids.

Recall Schedule :

Description of Recall Schedule : Official OEM and Distributor notification will begin 8/5/19. Estimated completion of notification by 8/16/19.

Planned Dealer Notification Date : AUG 05, 2019 - AUG 09, 2019

Planned Owner Notification Date : AUG 05, 2019 - AUG 09, 2019

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 : Arboc Specialty Vehicles

Address : 51165 Greenfield Parkway
Middlebury IN 46540

Country : US

Company Phone : 5748251723

Name : Champion Bus

Address : 331 Graham Road
Imlay City MI 48444

Country : US

Company Phone : 81072426474

Name : Glaval & Starcraft
Address : 10 Coachman Drive
Middlebury IN 46540
Country : US
Company Phone : NR

Name : TransTech Bus, a TCI Company
Address : 7 Lake Station Rd
Warwick NY 10990
Country : US
Company Phone : 8459882333

Name : Blue Bird Corporation
Address : 3920 Arkwright Rd. Suite 200
Macon GA 31210
Country : US
Company Phone : 478.822.2148

Name : Navistar, Inc.
Address : 2601 Navistar Way
Lisle IL 60532
Country : US
Company Phone : 331 332 1083

Name : Thomas Built Buses, Inc.
Address : 1408 Courtesy Road
High Point NC 27260
Country : US
Company Phone : 336.878.4825

Name : Turtle Top
Address : 67819 State Road 15
New Paris IN 46553
Country : US
Company Phone : 8002962105

* NR - Not Reported