

Part 573 Safety Recall Report

19V-554

Manufacturer Name : Champion Bus, Inc.**Submission Date :** JUL 25, 2019**NHTSA Recall No. :** 19V-554**Manufacturer Recall No. :** NR**Manufacturer Information :**

Manufacturer Name : Champion Bus, Inc.

Address : 331 Graham Road

P.O. Box 158 Imlay City MI 48444

Company phone : 810-724-6474

Population :

Number of potentially involved : 645

Estimated percentage with defect : 20 %

Vehicle Information :

Vehicle 1 : 2019-2019 Champion, Goshen Challenger, Crusader, Defender, G-Force, Impulse, LF Transport, Pacer

Vehicle Type : BUSES, MEDIUM & HEAVY VEHICLES

Body Style :

Power Train : NR

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 hatches produced between 8/1/18 and 5/21/19

Production Dates : AUG 01, 2018 - JUL 01, 2019

VIN Range 1 : Begin :

NR

End : NR

 Not sequential**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

Address : 13501 South Ridge Dr
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.

7/18/19 - NHTSA approved SMI recall 19E-042

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 :	All hatches that were built in the time frame have been segregated from production installation. New handles have been requested from SMI to change out so they are compliant and able to be used on units in production.

Recall Schedule :

Description of Recall Schedule :	Dealer and owner notification will begin 9/16/19. Estimated completion time 9/20/19
Planned Dealer Notification Date :	SEP 16, 2019 - SEP 20, 2019
Planned Owner Notification Date :	SEP 16, 2019 - SEP 20, 2019

* NR - Not Reported