



U.S. Department of Transportation
National Highway Traffic Safety Administration

ODI RESUME

Investigation: PE23016
Prompted By: VOQ Review
Date Opened: 09/27/2023 **Date:** 01/10/2025
Closed:
Investigator: Jacob Ebert **Reviewer:** Joshua Neff
Approver: Tanya Topka
Subject: 6L90 Transmission Failure

MANUFACTURER & PRODUCT INFORMATION

Manufacturer: General Motors, LLC
Products: 2016-2018, 2021-2022 Chevrolet Express and GMC Savana Cutaway Vans
Population: 28,058

Problem Description: The 6L90 valve body separator plate was machined out of tolerance on certain General Motors Chevrolet Express and GMC Savana cutaway van chassis which may result in unintended wear to the valve body check balls and a loss of motive power.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	1	47	0	649	658*	0
Crashes/Fires:	0	0	0	0	0	0
Injury Incidents:	0	0	0	0	0	0
Number of Injuries:	0	0	0	0	0	0
Fatality Incidents:	0	0	0	0	0	0
Number of Fatalities:	0	0	0	0	0	0

Description of Other:
Warranty

*Total eliminates duplicates received by the manufacturer

ACTION/SUMMARY INFORMATION

Action: This Preliminary Evaluation (PE) is closed with a manufacturer action (see NHTSA ID numbers 10253316 and 10243753).

Summary:

The Office of Defects Investigation (ODI) opened this Preliminary Evaluation (PE) after receiving one Vehicle Owner Questionnaire (VOQ) complaint related to four school buses built on General Motors (GM) van chassis. The VOQ alleged transmission failure resulting in a loss of all forward gear.

In ODI's pre-investigative discussions with GM, ODI learned that valve body separator plates had been machined out of tolerance during production periods between October 2016 to April 2017 and February 2021 to April 2021. This out of tolerance machining may create excessive wear to the valve body check balls, possibly resulting in an inability to engage drive or reverse.

The potential loss of drivability only begins when shifting from a park or neutral transmission selection and does not occur during a functional drive cycle. The average failure mileage of vehicles which experienced this condition is within warranty and related claims or complaints did not include any accidents, injuries, or fatalities.

After discussions with GM, Technical Service Bulletin (TSB) 23-NA-142 (NHTSA ID number 10243753) was released in September 2023. This technical service bulletin provides a procedure for technicians to replace the forward check ball and separator plate if found to be the cause of a customer's concern. During the course of the investigation, GM also released a Customer Satisfaction Program (CSP) N232428780 (NHTSA ID 10253316) in February 2024, to notify school bus and ambulance fleets of the concern and to proactively mitigate the risk in these essential-operation vehicles. Recently, ODI contacted multiple school bus fleets, verifying that there have not been any stranded buses mid-route from this condition. Additionally, ODI has not received any additional VOQ complaints since the opening of this investigation.

Based on the available information, including GM's TSB and CSP, this PE is closed. The closing of this investigation does not constitute a finding by NHTSA that a safety-related defect does not exist. The Agency reserves the right to take additional action if warranted by future circumstances. To review the ODI report cited in the Closing Resume ODI Report Identification Numbers document, go to [NHTSA.gov](https://www.nhtsa.gov).