U.S. Department of Transportation

National Highway Traffic Safety Administration

OFFICE OF DEFECTS INVESTIGATION

ODI RESUME

Investigation:	PE21015		
Prompted By:	Consumer Information		
Date Opened:	07/02/2021	**Date Closed:**	08/28/2026
Investigator:	Taylor Collins	**Reviewer:**	Bruce York
Approver:	Tanya Topka		
Subject:	Lateral Movement of Child Seat		

MANUFACTURER & PRODUCT INFORMATION

Manufacturer:	UPPAbaby
Products:	2020 UPPAbaby Knox Child Seats
Population:	1,913
Problem Description:	Despite secure installation, the subject seat can experience "Lateral Movement" when installed in a rear facing position.

FAILURE REPORT SUMMARY

	ODI	Manufacturer	EWR D&I	Other	Total	EWR Field Reports
All Incidents:	1	7	0	0	8	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:

ACTION/SUMMARY INFORMATION

Action: This (PE) Preliminary Evaluation is closed without a manufacturer action.

Summary:

The National Highway Traffic Safety Administration (NHTSA) Office of Defects Investigation (ODI) received a manufacturer communication, sent by UPPAbaby to subject 2020 UPPAbaby Knox Convertible Child seat owners, that alerted owners that the seat could exhibit lateral movement when used in rear facing position. The lateral movement could occur despite secure installation. The communication instructs owners to stop using the subject car seat immediately, and that if they continue to use the seat, it would be at their own risk. No injuries

or fatalities have been reported.

UPPAbaby's outreach to consumers first involved this communication in which the company requested owners to refrain from using the car seat. The company then issued a second communication that provided instructions to owners on how to disable the seat from further use and receive a monetary refund for returning the seat to UPPAbaby, plus a fifty-dollar incentive for doing so. ODI opened this investigation to evaluate the scope, frequency, and consequence of the alleged defect in the subject 2020 UPPAbaby Knox Convertible Child seat. ODI also opened a separate investigation, AQ21001, to seek information from UPPAbaby relating to these communications and its compliance with 49 C.F.R. Part 579.

According to UPPAbaby, the subject seats met all requirements of Federal Motor Vehicle Safety Standards (FMVSS) 213, and that at the time the subject seats were developed and sold, there was no standard for lateral movement. UPPAbaby reported producing 15,335 of the subject seats, of which only 1,913 were sold to consumers. Despite their claim that the seat met all federal requirements UPPAbaby pulled back and destroyed 13,422 of those seats prior to sale. Of the 1,913 subject seats, UPPAbaby indicated that, as of mid-December 2020, all purchasers had been contacted about the lateral-movement issue. UPPAbaby further stated that 87% of the seats had been retrieved from consumers. This left approximately 411 seats in the market.

UPPAbaby also, since destroying the majority of these seats and notifying owners of the remaining seats, revised the subject seat with design changes that increased the seat base dimensions for the purpose of increasing lateral stability. The original design dimensions (L x W x H) of the Knox child seat were 330mm x 300mm x 135mm, while the new/revised Knox child seat dimensions are 365mm x 356mm x 135mm.

To understand the potential safety consequence of the excessive lateral movement described in UPPAbaby's communications to consumers, ODI conducted dynamic driving testing and static load testing on the subject, revised subject, and industry peer child seats. NHTSA's Vehicle Research and Test Center (VRTC) then investigated differences in lateral performance. The initial static testing determined a need for utilizing dynamic tests, which were conducted using vehicles, subject seats, peer seats, and controlled driving maneuvers. The dynamic testing determined a difference in lateral movement during lane change maneuvers between the revised subject seat and the subject seat, as compared to their peers. During the most severe maneuver, the subject seat had on average a 70% greater inward (towards the center of the vehicle) lateral tilt angle than its revised version. This testing also found that the average inward lateral movement of the subject seat was 50% more than its worst performing peer. ODI shared the test results with UPPAbaby. The testing documentation, including videos and photographs, can be found on the public investigation website at https://www.nhtsa.gov/recalls?nhtsaId=PE21015.

While the subject seats exhibited inward lateral movement substantially greater than its revised version and its worst performing peer, ODI could not, based on these tests, conclude that an unreasonable risk exists to a child occupant. Upon further validation of the claims submitted by UPPAbaby the count of claims alleging lateral movement has been revised from 18 in the opening resume for this investigation down to a total of 8.

ODI is closing this investigation. The closing of this investigation does not constitute a finding by NHTSA that no safety-related defect exists. The agency reserves the right to take further action if warranted by circumstances.