

FEDERAL REGISTER Document Number: 2021-27538

Summary: NHTSA is issuing this final rule to establish Federal Motor Vehicle Safety Standard (FMVSS) No. 227, “Bus rollover structural integrity,” to enhance the rollover structural integrity of over-the-road buses (motorcoaches), and other buses with a gross vehicle weight rating (GVWR) greater than 11,793 kilograms (kg) (26,000 pounds (lb)). This final rule, issued pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21), requires the buses to provide a “survival space” in a rollover test to protect occupants from possible collapse of the bus structure around them. In addition, to reduce the likelihood of ejection, this final rule prohibits emergency exits from opening in the rollover test. This final rule ensures that bus roofs and side wall panels will resist deformation and intrusion into the occupant space in rollover crashes, and reduces the risk of emergency exits becoming ejection portals in a crash.

Agency: National Highway Traffic Safety Administration

Parent Agency: Department Of Transportation

Date Published: December 29, 2021

Docket Number: NHTSA-2021-0088

Action:

Final Rule

Action Reply:

Comments

Date Submitted: January 18, 2022

Comments Submitted By:

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Attachments: (File Name)

FMVSS-227-Additional-Safety_David-DeVeau.pdf

Introduction

This submittal is in support of passing this final rule that will add “Bus Rollover Structural Integrity” to the Federal Motor Vehicle Safety Standard No. 227.

The following comments are in regards to modernizing the seating systems in order to control survival space in a rollover and all other types of bus transport vehicle crashes as specified in the following Federal Regulation.

49 CFR § 571.207 - Standard No. 207; Seating systems.

S4.2. General performance requirements. When tested in accordance with S5, each occupant seat shall withstand the following forces, in newtons, ~~except for to include: a side-facing seat;~~ a passenger seat on a bus ~~other than a school bus;~~ a passenger seat on a school bus; ~~with a GVWR greater than 4,536 kilograms (10,000 pounds); and, except for:~~ a passenger seat on a school bus with a GVWR less than or equal to 4,536 kg manufactured before October 21, 2011; ~~and, a bus or school bus manufactured before December 30, 2024; and,~~

(a) In any position to which it can be adjusted ~~and/or is facing~~ - 20 times the mass of the seat in kilograms multiplied by 9.8 applied in a forward longitudinal direction;

(b) In any position to which it can be adjusted ~~and/or is facing~~ - 20 times the mass of the seat in kilograms multiplied by 9.8 applied in a rearward longitudinal direction;

(c) For a seat belt assembly attached to the seat - the force specified in paragraph (a), if it is a forward facing seat, or paragraph (b), if it is a rearward facing seat, in each case applied simultaneously with the forces imposed on the seat by the seat belt assembly when it is loaded in accordance with S4.2 of § 571.210; and

(d) In ~~its rearmost any~~ position - a force that produces a 373 newton meters moment about the seating reference point for each designated seating position that the seat provides, applied to the upper cross-member of the seat back or the upper seat back, ~~in a rearward longitudinal direction for forward-facing seats and in a forward longitudinal direction for rearward-facing seats.~~

Summary

It is critical in order to “control survival space” that there must be control of occupants seating positions. Further that all occupants must be restrained in their seating positions with a seatbelt assembly.

Seatbelt usage was first enacted into law on January 1, 1968 with the exception of buses. This must include all road vehicles and not be limited by GVWR or type of vehicle. This standard must be updated in order to effectively reduce all road traffic fatalities.

There must not be any exceptions to this proven life saving safety system. This is a Federal law and the only authority the State has is in the level of enforcement. IE: is this a ticketable offence; is the ticket issued to the driver and/or individual adult aged passenger?

Buses and especially school buses must be included with seatbelt assemblies. These modes of transportation should not have subpar safety technology for the drivers and/or passengers.

Likened to aircraft, there are critical conditions that all passengers must be secured in their seats, such as in take-off and landings as well during high turbulence. A bus would also use a ‘fasten seatbelt’ sign. That children riding in a school bus would always be required to wear seatbelts while the bus is in motion. Children could swap seats during drop-off and pick-up bus stops for example when the sign is off. Passengers on a tour bus would be allowed to move about, to use the bathroom for example, in conditions like bus lane travel on a highway or at low speeds in highway traffic.

It is understood that there is an expense to modify most buses presently in service with seatbelts and the reinforced seating to accommodate forces. There must also be a responsible implementation of these updates to apply to all new busing designs with a priority to our school bus systems, in a Federal Rule of Law.

This comment has proposed the same date as specified in this rule for effective implementation of the additional engineering and regulatory requirements for seatbelts that will further increase road vehicle safety and will coincide with structural survival space improvements for the rollover conditions of buses.