

4501-5-03

School buses used to transport pupils with special needs.

[Comment: For dates and availability of material incorporated by reference in this rule, see paragraph ~~(R)~~(S) of rule 4501-5-01 of the Administrative Code.]

(A) General requirements.

- (1) All school buses ~~designed or used for transporting pupils with special transportation needs~~equipped with wheelchair lifts shall comply with rules 4501-5-01 to 4501-5-3 of the Administrative Code, when applicable.
 - ~~(2) All school buses designed or used for transporting pupils having special transportation needs shall comply with school bus federal motor vehicle safety standards (FMVSS) as applicable to their gross vehicle weight rating category.~~
 - ~~(3)~~(2) School buses used for the transportation of pupils with special needs that require the use of a wheelchair and/or other mobile seating devices which prohibit use of the regular service entrance shall be equipped with a power lift.
 - ~~(4)~~(3) The lift shall be located on the right side of the body, in no way attached to the exterior sides of the bus. When not extended, the lift shall be confined within the perimeter of the school bus body. Buses equipped with a lift shall not have passenger seats installed directly across the aisle way from the lift unless they are seats that have been designed to be removed for the purposes of alternative passenger securement.
 - ~~(5)~~(4) All school buses ~~transporting pupils with special needs~~equipped with wheelchair lifts shall be equipped with an electronic communication system. The electronic communication system shall be capable of constant contact with the school or dispatch point. This equipment may be excluded from the bus ~~manufacturer's~~manufacturer's bid and purchased separately.
- (B) Aisle width. ~~All aisles leading from the wheelchair area to an emergency door shall be a minimum of thirty inches in width to permit passage of a wheelchair/mobile seating device or mobility aid.~~

All school buses equipped with a power lift shall provide a minimum thirty inch pathway leading from any wheelchair position to an emergency door that is at least thirty inches wide.

- (C) All school buses equipped with attachment points, securement devices and/or wheelchair securement systems shall also be equipped with a durable webbing cutter having a full width hand-grip and protected blade. The cutter must be appropriately

stored in the driver's compartment to the left of the driver. This equipment may be excluded from the bus manufacturer's bid and purchased separately.

~~(C)~~(D) Wheelchair securement.~~School~~

School buses designed for the transportation of pupils ~~with special needs in the state of Ohio using wheelchairs or special mobility devices;~~ shall have wheelchair securement and occupant restraint systems that comply with SAE standard J2249 installed as specified in FMVSS 571.222, sections 5.4.1 to 5.4.4 at each wheelchair location.

~~(D)~~(E) Wheelchair tie down systems.~~Securement~~

Securement system for mobile seating device and occupant.

(1) The designated area for the wheelchair/mobile seating devices shall be a minimum of fifty inches longitudinally by thirty inches laterally. The designated area shall be free of all obstructions pursuant to FMVSS 571.222.

~~(2) All buses equipped with attachment points securement devices and/or wheelchair securement systems shall also be equipped with a durable webbing cutter having a full width hand-grip and protected blade. The cutter must be appropriately stored in the driver's compartment to the left of the driver. This equipment may be excluded from the bus manufacturer's bid and purchased separately.~~

~~(3)~~(2) All securement system attachments or coupling hardware not permanently attached shall be designed to prohibit accidental disconnecting.

~~(4)~~(3) All attachment or coupling systems designed to be connected or disconnected frequently shall be accessible and operable without the use of tools or other mechanical assistance.

~~(5)~~(4) No mobile seating device securement system hardware shall be placed so that a mobile seating device can be placed blocking access to lift door or emergency door(s) with the exception of track hardware.

~~(6)~~(5) Detailed instructions, including a parts list, regarding installation and use of the system shall be provided with each vehicle equipped with an occupant securement system.

~~(7)~~(6) Detailed instruction, including a diagram regarding the proper placement and position of the system including correct belt angles, shall be provided with each vehicle equipped with an occupant securement system.

~~(E)~~(F) Seat spacing.~~Flexibility~~

Flexibility in seat spacing and floor plan layout to accommodate special devices shall be permitted. ~~Altered vehicles are required to meet all federal and state standards applicable to the gross vehicle weight category and designed maximum capacity.~~

~~(F)~~(G) Special service entrance.

- (1) The special service entrance door(s) shall be at any convenient point on the right curb side of the bus. When the special service entrance is located forward of the rear wheels, the special service entrance door(s), in the open position, shall not obstruct the regular service entrance.
- (2) The opening may extend below the floor through the bottom of the body skirt. If such an opening is used, reinforcements shall be installed at the front and rear of the floor opening to support the floor and give the same strength as other floor openings.
- (3) The opening, with doors open, shall be of sufficient width and depth to allow the passage of wheelchairs/mobile seating devices and mobility aids. The minimum clear opening shall be fifty-six inches in height
- (4) A drip molding shall be installed above the opening to effectively divert water from the opening. Door posts and headers for the special service entrance shall be reinforced sufficiently to provide support and strength equivalent to the areas of the side of the bus not used for service doors. A head bumper pad shall be installed above the special service entrance and/or on the lift frame.

~~(G)~~(H) Special service entrance doors.

- (1) A single door or double door may be used.
- (2) All doors shall open outwardly. The special service entrance doors shall have a positive fastening device/s to hold doors in the open position and door bumpers to prevent door-to-body contact.
- (3) All doors shall be weather-sealed. Buses with double doors shall be so constructed that a flange on the forward door overlaps the edge of the rear door when closed.
- (4) When manually operated dual doors are provided, the rear door shall have at least a one-point fastening device to the header. The forward mounted door shall have at least three-point fastening devices. One shall be to the header, one to the floor line of the body, and the other shall be into the rear door. These locking devices shall afford maximum safety when the doors are in the closed position.

- (5) The door and hinge mechanism shall be of a strength that is greater than, or equivalent to, the emergency door exit. Door materials, panels and structural strength shall be equivalent to the conventional service and emergency doors. Color, lettering and other exterior features shall match adjacent sections of the body.
- (6) Each door shall have a window compatible within one inch of the lower line of adjacent sash. The window shall be installed to provide a dustproof/watertight fit.
- (7) The special service entrance shall be equipped with a device that will actuate a ~~green flashing~~ visible signal located in the driver's compartment when the door or doors are not securely closed and the ignition is in on position.

~~(H)~~(I) Lift area lighting. Adequate

Adequate lighting of the lift area (both inside and outside) shall be provided. The lighting light(s) used to illuminate the interior and exterior of the lift area shall be activated when the lift door is open. in compliance with FMVSS 571.404

(J) Weight distribution.

On buses equipped with a power lift, the battery box and fuel tank may be located by the manufacturer to provide equal weight distribution to compensate for the weight of the power lift mechanism.

(K) Alternator and power supply.

A circuit breaker shall be installed between the power source and the lift motor. It shall be located as close to the power source as possible but not within the passenger/driver compartment.

(L) Alternator shall have a minimum power output of two-hundred forty amps. "Type A" buses must be the largest alternator output available from the original equipment manufacturer.

~~(I) The light(s) used to illuminate the interior and exterior of the lift area shall be activated when the lift door is open.~~

~~(J)~~(M) Power lift.

The lift and installation shall comply with the requirements set forth in FVMSS 571.403 (platform lift systems for motor vehicles) and FMVSS 571.404 (platform lift installations in motor vehicles).

(1) Design

(a) The lifting mechanism and platform shall be able to lift a minimum payload of eight hundred pounds.

(b) Lifts installed in all school buses shall be fully automatic, including folding and unfolding of the platform.

(2) Controls shall be provided that enable the operator to activate the lift mechanism from either inside or outside of the bus.

~~(3) A circuit breaker shall be installed between the power source and the lift motor. It shall be located as close to the power source as possible, but not within the passenger/driver compartment.~~

~~(4)~~(3) School buses ~~for the transportation of children with disabilities delivered to the state of~~ delivered to Ohio owners after the effective date of this rule shall have the lift installed by the body manufacturer or authorized agent. The installation shall be certified and the documentation shall be provided by the installer. It shall be the responsibility of the installer to ensure the levelness of the vehicle after installation. The location of the lift shall not adversely affect the legal axle loading, the maneuverability, structural, or the safe operation of the vehicle in which it is installed.

~~(5)~~(4) When the special service entrance is installed adjacent to the stepwell or has a seat or wheelchair position directly in front of or behind the special service entrance, a barrier panel shall be installed. The barrier panel shall prevent the possibility of a body limb from becoming entangled in the lift mechanism. The barrier panel may be flush to the outside wall of the bus or at a dimension that will prohibit a passenger from coming in contact with the lift mechanism. The panel may be constructed of aluminum or polycarbonate. The end of the barrier panel exposed to the passenger compartment shall be secured to a padded stanchion extending from the floor to the ceiling. The stanchion shall be attached to the roof bow or a reinforced panel in the ceiling. If the barrier panel is used in conjunction with a padded stanchion and modesty panel, it shall extend approximately six inches above the lift platform and extend beyond the stationary frame or the most inner part of the lift exposed to the passenger compartment. If the barrier panel is a separate installation, it shall be constructed of the same materials and extend from the floor to approximately six inches above the lift platform and extend beyond the stationary frame or the most inner part of the lift exposed to the passenger compartment. The barrier panel shall be in compliance with FMVSS 571.302 and FMVSS 571.222.

~~(6) School buses that require major wheelchair lift repairs shall be inspected by a factory authorized dealer or agent following the completion of repairs. The Ohio state highway patrol shall be notified after the repair and authorized inspection have been completed and prior to the school bus being operated with students on board.~~

Effective:

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Certification

Date

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