

MSP/MCD DECAL APPLICATION POLICY FOR SCHOOL BUSES

SPECIAL NEEDS EQUIPMENT

Wheelchair Tiedown and Occupant Restraint System (WTORS): General

The WTORS shall be designed, installed, and operated to accommodate passengers in a forward facing orientation and shall comply with all applicable requirements.

RED: Any vehicle manufactured after 1/17/94 with a side facing securement system. *FMVSS 55.4.1.2(a)*

All vehicles retrofitted shall comply with all applicable requirements and standards. *FMVSS 571.222 55.4.1 through 55.4.4, 49 CFR 38.21 (a) (b)*

RED: Any retrofitting of a vehicle in non-compliance with *FMVSS 571.222*.

Mobility devices shall be affixed to the vehicle in such a manner that no exit or aisle is blocked in the vehicle.

RED: Any device installed that impedes any aisle or exit. *FMVSS 571.217*

RED: Any oxygen cylinder secured to a wheelchair that impedes access to any exit.

The WTORS system shall be complete as dynamically tested by the manufacturer. Installation shall be in compliance with manufacturer recommendations and shall meet all the requirements of *FMVSS 571.222*.

RED: When in use any mismatched or missing securement system part; anchor point, anchorage, end fitting, belt, strap, fasteners, four-point tiedown, four-point strap type tiedown, or wheelchair lockdown device or system.

RED: Wheelchair securement missing or improperly installed, loose or damaged. *NST-SBI 12.20*

All securement and restraint system hardware and components shall be free of sharp or jagged areas and shall be of a non-corrosive material or treated to resist corrosion in accordance with *FMVSS 571.201, 209 4.3(a), ANSI RESNA 4.4*

RED: Any component having any sharp or jagged edge.

RED: Use of a bungee cord in the WTORS system.

RED: Securement, seat belt assembly, tracking or tiedown device using a bungee cord when WTORS is in use.

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SPECIAL NEEDS EQUIPMENT (cont.)

Each WTORS location shall consist of minimum of four anchorage points. Two points shall be located in front and two in the rear. The anchorage shall be attached to the floor of the vehicle.

RED: Less than 4 anchorage points for any wheelchair tiedown. *FMVSS 571.222 S5.4.1.2 (b), ASNI RESNA 4.5, National Standards for Specially Equipped School Buses 1, Securement and Restraint System for Wheelchair/Mobility Aid and Occupant 2, Wheelchair/Mobility aid securement system (a)*

Each WTORS device (webbing or strap assembly) shall provide a means of adjustment to remove slack. The system should not allow for more than a 2" movement in any direction under normal driving conditions 49 CFR 38.23.

RED: When in use any frayed, rusted, cut, or inoperable slack adjuster. *FMVSS 517. 222 S5.4.2. (2)*

At least one belt cutter shall be carried in the vehicle when any special adaptive equipment is installed. 45 CFR 1310, Head Start Regulations 2001

RED: No belt cutter accessible to the driver and/or aide.

Aisles: General

All school buses equipped with a power lift or a lift door shall provide a 30" aisle leading from any wheelchair/mobility aid position to at least one emergency exit and the lift area. ADA Accessibility Guidelines A4.2.1 (3)

RED: Aisle width less than 30" if equipped with a lift or lift door.

RED: No access to both the lift and at least one emergency exit.

No wheelchair station or component thereof can impede any aisle or the exit of any individual transported in the vehicle.

RED: Impeding an emergency exit

RED: Station securement system in aisle way

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SPECIAL NEEDS EQUIPMENT (cont.)

Seating for Vehicles with Special Adaptive Equipment: General

All vehicles shall maintain compartmentalization where normal seating positions are present FMVSS 571.222.

RED: Compartmentalization is incomplete, or a barrier or stanchion is removed.

RED: Improper seat spacing.

RED: Any seat that is rear or side facing that fails to comply with all the provisions of FMVSS 571.222.

All seating and securement systems shall meet the federal standards for school bus passenger seating and crash protection, seat belt assemblies, seat belt assembly anchorage's, and child restraint systems where applicable. FMVSS 571.222,209, 210, 213, 225, Head Start Regulations 2001

RED: Seat belt, car seat and/or harness that fails to meet FMVSS standards.

RED: Any securement of a person, car seat, seat belt, or harness that uses a bungee cord.

Power Lifts and Ramps: General

No vehicle shall have a lift door where a lift is pending installation or removed that the door is not sealed and the handle removed.

RED: Door not sealed and secured per manufacturer instructions.

RED: Door not secured to prevent opening.

Installation of all lifts in new and retrofitted vehicles shall be in compliance with all written manufacturer specifications. All equipment shall be used as dynamically tested. Maintenance of the equipment shall be per manufacturer specifications. ADA Accessibility Guidelines 1192.23, 49 CFR 38.23, 49 CFR 37

YELLOW: Required components are improperly mounted.

YELLOW: Any incomplete installation of lift equipment.

YELLOW: The lift door cannot be secured in the open position.

YELLOW: The lift door seal is loose or missing.

RED: Lift installation damaged the structural integrity of the vehicle.

RED: Any working part missing or inoperable (cables, pulleys, shaft, etc.).

RED: Any broken weld or damaged pivot point.

RED: Wheelchair lift does not function as designed or is inoperable.

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SPECIAL NEEDS EQUIPMENT (cont.)

Lift Design and Operation: General

The design load of the lift shall be at least 600 pounds. The lifting mechanism and platform shall be capable of lifting a minimum of 800 pounds. The lift shall not fold while the lift is in motion from the surface of the ground to vehicle level. 49 CFR 38

The lift shall deploy to all levels, ground, curb, and intermediate positions. 49 CFR 38

The lift shall incorporate an emergency method of deploying to ground level with a lift occupant, and raising and stowing the empty lift if the power to the lift fails. 49 CFR 38

Lift design shall prevent excessive pressure that could damage the lift system when the platform is fully lowered or raised. Lift design shall prevent any jacking of the vehicle.

RED: Wheelchair lift does not function as designed or is inoperable. *NST SBI 12.20*

RED: Any hydraulic line leaking during lift operation. *NST SBI 12.20*

RED: Lift folds while in motion.

RED: Manual over ride system missing or inoperable.

RED: Lift system damaged due to excessive loads.

RED: Lift jacks vehicle in any position loaded or unloaded.

Controls shall be provided that enables the operator to activate the lift mechanism from either inside or outside the vehicle. 49 CFR 38

All controls and emergency operation shall be ADA compliant and complete as provided by the manufacturer. 49 CFR 38

Interlock systems that are combined in the control shall prove appropriate mechanisms or systems to ensure the vehicle cannot be moved when the lift is deployed. 49 CFR 38

RED: Controls missing or inoperable from either inside or outside the vehicle.

RED: Incomplete controls as provided by manufacturer.

Platform and Platform Gaps: General

The surface of the platform shall be free of any protrusions over ¼" high. All platforms shall be slip resistant. 49 CFR 38

RED: Platform surface has any protrusion that exceeds ¼"

The platform surface shall have a minimum of 30" clear width measured from 2" above the platform surface to 30" above the surface of the platform. The clear length of the platform shall be a minimum of 48" measured 2" above the platform to 30" above the surface of the platform. 49 CFR 38

RED: Platform size less than 30x48 when measured 2" above surface

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SPECIAL NEEDS EQUIPMENT (cont.)

Any openings between the platform surface and the raised barriers shall not exceed 5/8" in width. 49 CFR 38 A gap between the lift and bus body shall not be greater than 1/2" in width. 49 CFR 38

RED: Gap between surface and raised barriers in excess of 5/8"

RED: Gap between lift and body greater than 1/2"

Barriers: General

The lift platform shall be equipped with barriers to prevent any of the wheels of a wheelchair or mobility aid from rolling off the platform during its operation. 49 CFR 38 A moveable barrier or inherent design feature shall prevent a wheelchair or mobility aid from rolling off the edge closest to the vehicle until the platform is in its fully raised position. 49 CFR 38 The loading edge barrier which functions as a loading ramp at ground level, shall be sufficient when raised or closed, or a supplementary system shall be provided, to prevent a power wheelchair or mobility device from riding over or defeating it. 49 CFR 38 The lift shall permit both inboard and outboard facing wheelchairs and mobility aid users. 49 CFR 38

RED: Lift gate lip does not lock when lift is in the air

RED: Incomplete or insufficient barriers to prevent roll off in any direction

RED: Lift gate lip does not automatically release when lift is on the ground

Handrails: General

Handrails shall move in tandem with the lift and shall be graspable and provide support to standees throughout the entire lift operation. 49 CFR 38

RED: Handrails fail to move in tandem with the lift or fails to provide support for standees.

Handrails shall be capable of withstanding a force of 100 pounds concentrated at any point on the handrail. 49 CFR 38

RED: Damage to handrails due to excessive force

Medical Support Equipment: General

RED: Any equipment carried in the vehicle that is not properly secured so that it creates a hazard.