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WHEELCHAIR SAFETY DEVICES 7450.0200

CHAPTER 7450 DEPARTMENT OF PUBLIC SAFETY STATE PATROL DIVISION WHEELCHAIR SAFETY DEVICES

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7450.0100 DEFINITIONS.

Subpart 1. Scope. For the purpose of parts 7450.0100 to 7450.0900, the following terms shall have the meanings ascribed to them.

Subp. 2. Anchorage. "Anchorage" means the provision for transferring wheelchair securement loads to the vehicle structure.

Subp. 3. Commissioner. "Commissioner" means the commissioner of public safety or his duly authorized agent.

Subp. 4. Interior paneling. "Interior paneling" means the material used to finish the interior of a vehicle, not including the floor.

Subp. 5. Occupant restraint. "Occupant restraint" means a seat belt assembly and/or upper torso restraint intended to hold the occupant of a wheelchair in a generally seated position during transportation by motor vehicle.

Subp. 6. Operator. "Operator" means any person, firm, partnership, corporation, service club, public or private agency, city, town, or county.

Subp. 7. Wheelchair. "Wheelchair" means a chair mounted on wheels to facilitate the mobility of a sick, injured, invalid or handicapped person in a generally seated position. The term includes a device generally recognized as a wheelchair even though equipped with reclining backrest or special apparatus. The term does not include any device not equipped with wheels, nor does it include an ambulance stretcher or cot, whether equipped with wheels or not.

Subp. 8. Wheelchair securement device; securement device. "Wheelchair securement device" or "securement device" means an apparatus installed in a motor vehicle for the purpose of securing an occupied wheelchair into a location in the vehicle.

Statutory Authority: *MS s 299A.18*

7450.0200 PURPOSE, AUTHORITY, AND SCOPE.

Subpart 1. Purpose. The purpose of parts 7450.0100 to 7450.0900 is to establish minimum standards for approval of wheelchair securement devices in vehicles and approval of seat belt assemblies and anchorages used to protect persons in wheelchairs while transported in vehicles.

Subp. 2. Authority. Parts 7450.0100 to 7450.0900 are promulgated pursuant to the authority granted by Laws of Minnesota 1978, chapter 752.

Subp. 3. Scope. Parts 7450.0100 to 7450.0900 apply to the transportation by motor vehicle of any sick, injured, incapacitated, or handicapped person while occupying a wheelchair, which transportation is offered or provided by an operator to the public or to its employees or in connection with any other service offered by the operator including schooling or nursing homes and convalescent or child care services.

Subp. 4. Exception. Parts 7450.0100 to 7450.0900 do not apply to any school bus subject to regular school bus inspection pursuant to Minnesota Statutes, sec-

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tion 169.451, nor do they apply to incidental transportation of an occupied wheelchair under circumstances other than as provided in subpart 3.

Statutory Authority: *MS s 299A.18*

7450.0300 WHEELCHAIR SECUREMENT.

Subpart 1. Sufficient strength. An occupied wheelchair transported in a vehicle shall be secured with a securement device of sufficient strength to prevent forward, backward, lateral, or vertical movement of the wheelchair when the device is engaged and the vehicle is in motion, accelerating, or braking.

Subp. 2. Attached to frame. Each wheelchair securement device shall attach to the frame of the wheelchair without damaging the frame. "Damage" includes effects harmful to the strength, integrity or serviceableness of the wheelchair, but does not include minor dents, scratches, or other cosmetic blemishes not materially affecting serviceableness.

Subp. 3. Limitation. A wheelchair securement device shall not be attached to a wheel of a wheelchair.

Statutory Authority: *MS s 299A.18*

7450.0400 MINIMUM STANDARDS.

Each wheelchair securement device shall:

A. Attach to the wheelchair frame on at least three points. The three points of contact shall be spaced to provide effective securement. Alternatively, a securement device meeting all other requirements of this chapter may attach to two widely spaced points on the wheelchair frame if the wheel tires or the wheelchair frame abuts an unyielding surface in a manner which meets the approval requirements of part 7450.0500.

B. Consist of at least two webbing-type belts described in subitem (1) or at least two all metal devices described in subitem (2) or one or more of each such device.

(1) Webbing-type devices shall be assemblies that meet or exceed Type 2 pelvic restraint seat belt requirements as specified in section S4.2 (2)(b) of Federal Motor Vehicle Safety Standard No. 209, Code of Federal Regulations 1977, title 49, part 571.209 or be certified by the manufacturer that such device meets or exceeds assembly strength of 5,000 pounds in loop fashion or 2,500 pounds on each anchorage leg.

(a) Certification may be the specification listed in catalogs or publications by the manufacturer.

(b) All new construction of such securement devices and repairs to webbing shall conform with standards established by the manufacturer of the webbing.

(2) All metal securement devices shall be of a design and construction that provides wheelchair securement strength at least equal to the strength of a webbing-type device comprised of three separate attachments and anchorages.

C. Be free of sharp edges, corners, and jagged projections to minimize injury to persons in the event of unintentional contact.

D. Be capable of retraction, and be readily removable or otherwise suitably storable when not in use.

E. Be anchored to the vehicle at not less than two separate points with bolts, nuts, and lock washers or self-locking nuts.

(1) Bolts used shall be not less than three-eighths inch in diameter and of National Fine Thread SAE grade 5 designation or equivalent.

(2) Where anchorage bolts do not pierce the vehicle frame, sub-frame, bodypost, or equivalent metal structure, a metal reinforcement plate or washer not less than 1/16 inch thick by 2-1/2 inches in diameter is required.

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(3) In no event shall interior paneling constitute anchorage for a point of securement.

(4) A metal track, rail, or similar device permitting attachment of the securement device at optional points thereon may be used to anchor the securement device, provided:

(a) the track, rail, or other device is secured to the vehicle in compliance with anchorage requirements of this part; and

(b) the attachment of the securement device to the anchor point is by means of a positive attachment metal fitting.

F. The method or device that provides attachment of the securement device to the wheelchair frame and the method or device locking the securement device in the load-holding mode shall each be of a strength and design that will assure performance of their intended function until the securement device is intentionally released.

G. Buckles, anchorage fittings, and other components essential to the functioning of the securement device shall be integrated into the securement device in accordance with recognized practices and in a manner that preserves the overall strength of the securement device.

Statutory Authority: *MS s 299A.18*

7450.0500 APPROVAL PROCEDURE.

Subpart 1. Application. Application for approval of a wheelchair securement device shall be made to the commissioner and shall be accompanied by the manufacturer's actual or proposed written installation instructions and photographs or drawings clearly depicting the construction of the device and its physical characteristics, including all mounting hardware.

Subp. 2. Demonstration. The applicant shall furnish a vehicle with the securement device installed therein, and demonstrate the device by attaching it to a wheelchair furnished by the applicant. The commissioner may load the wheelchair to 140 pounds and require the vehicle be accelerated, driven around corners, and subjected to hard braking at speeds of 30 miles per hour or less. Movement of the wheelchair more than one inch in any direction, including vertically, during such test shall be grounds for refusal of approval. Measurement of movement shall be at the points where wheelchair wheels contact the floor. Damage to the wheelchair or any other property during such test shall be the responsibility of the applicant.

Subp. 3. Approval. Upon determining that the securement device meets the requirements of this chapter, the commissioner shall issue a certificate of approval authorizing use of the device.

Subp. 4. Revocation. The commissioner may revoke any approval granted hereunder upon a showing that the securement device does not meet a requirement of this chapter.

Subp. 5. Label. Each wheelchair securement device shall be permanently labeled with the name, initials, or trademark of the manufacturer and the model designation of the device. The label shall be readily visible and legible from the outside of the device when it is properly mounted to the vehicle and in use.

Statutory Authority: *MS s 299A.18*

7450.0600 OCCUPANT RESTRAINT.

Subpart 1. Seat belt assembly. Each vehicle equipped with a wheelchair securement device shall be equipped with a Type 2 seat belt assembly with a detachable upper torso portion at each wheelchair position in the vehicle or, in the alternative, shall be equipped with a Type 1 pelvic restraint assembly and a length of Type 1 or Type 2 seat belt webbing, with buckle, adequate to encircle the chest of the wheelchair occupant and the backrest of the wheelchair.

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Subp. 2. **Standard.** Type 1 and Type 2 seat belt assemblies shall meet the requirements of sections S 1 to S 4.4 of Federal Motor Vehicle Safety Standard No. 209, Code of Federal Regulations 1977, title 49, part 571.209.

Subp. 3. **Installation and anchorage.** Type 1 and Type 2 seat belt assemblies and the detachable upper torso restraint, if a detachable upper torso restraint is installed in lieu of using a length of seat belt webbing to encircle the chest of the occupant and the backrest of the wheelchair, shall be installed and anchored in accordance with sections S 1 to S 4.3.2 of Federal Motor Vehicle Safety Standard No. 210, Code of Federal Regulations 1977, title 49, part 571.210.

Statutory Authority: *MS s 299A.18*

7450.0700 SECUREMENT.

It shall be the responsibility of the driver of any vehicle equipped with a wheelchair securement device to:

A. Properly secure an occupied wheelchair prior to moving the vehicle, unless the wheelchair occupant is capable of securing the device and does so.

B. Fasten the seat belt assembly, and upper torso restraint if so equipped, around the occupant of the wheelchair, unless the occupant is capable of fastening same and does so. The driver shall not fasten the seat belt assembly or the upper torso restraint if the occupant or other responsible person advises the driver that to do so would aggravate a physical condition of the occupant. In the event the physical condition would be aggravated by the use of but one of the devices, the device that would have no effect on the physical condition shall be fastened in the required manner.

C. Retract, remove, or otherwise store securement devices and seat belt assemblies when not in use to prevent tripping of persons and damage to devices.

Statutory Authority: *MS s 299A.18*

7450.0800 INSPECTION, REMOVAL, AND CORRECTION.

The commissioner may order the removal or correction of any securement device upon determining that the device, without regard to date of installation:

A. is not capable of sustaining loads imposed thereon in restraining an occupied wheelchair; or

B. the securement device permits excessive movement of an occupied wheelchair.

Statutory Authority: *MS s 299A.18*

7450.0900 PROHIBITIONS.

Subpart 1. **Requirement dates.** Wheelchair securement devices and occupant restraint systems installed in vehicles after December 31, 1979 must be of a type approved in accordance with this chapter. After December 31, 1980, every vehicle included within the scope of this chapter must be equipped with an approved wheelchair securement device and occupant restraint system at each wheelchair position.

Subp. 2. **Provisional requirement.** After November 6, 1979 and until an approved wheelchair securement device is installed in a vehicle, no person shall transport an occupied wheelchair in a vehicle unless the wheelchair is secured to prevent forward, backward, lateral, or vertical movement when the vehicle is in motion, accelerating or braking, and the occupant is restrained by at least one belt or strap.

Statutory Authority: *MS s 299A.18*