

(e) Sharp edges and corners in a locomotive cab and a passenger car shall be either avoided or padded to mitigate the consequences of an impact with such surfaces.

(f) Each seat provided for a crew-member regularly assigned to occupy the cab of a locomotive and each floor-mounted seat in the cab shall be secured to the car body with an attachment having an ultimate strength capable of withstanding the loads due to the following individually applied accelerations acting on the combined mass of the seat and a 95th-percentile adult male occupying it:

- (1) Longitudinal: 8g;
- (2) Lateral: 4g; and
- (3) Vertical: 4g.

(g) If, for purposes of showing compliance with the requirements of this section, the strength of a seat attachment is to be demonstrated through sled testing, the seat structure and seat attachment to the sled that is used in such testing must be representative of the actual seat structure in, and seat attachment to, the rail vehicle subject to the requirements of this section. If the attachment strength of any other interior fitting is to be demonstrated through sled testing, for purposes of showing compliance with the requirements of this section, such testing shall be conducted in a similar manner.

§ 238.235 Doors.

(a) By December 31, 1999, each powered, exterior side door in a vestibule that is partitioned from the passenger compartment of a passenger car shall have a manual override device that is:

- (1) Capable of releasing the door to permit it to be opened without power from inside the car;
- (2) Located adjacent to the door which it controls; and
- (3) Designed and maintained so that a person may readily access and operate the override device from inside the car without requiring the use of a tool or other implement. If the door is dual-leafed, only one of the door leaves is required to respond to the manual override device.

(b) Each passenger car ordered on or after September 8, 2000, or placed in service for the first time on or after September 9, 2002 shall have a minimum of two exterior side doors, each door providing a minimum clear opening with dimensions of 30 inches horizontally by 74 inches vertically.

(c) If the train operator does not respond to the alerter or maintain proper

imum of two exterior side doors, each door providing a minimum clear opening with dimensions of 30 inches horizontally by 74 inches vertically.

NOTE: The Americans with Disabilities Act (ADA) Accessibility Specifications for Transportation Vehicles also contain requirements for doorway clearance (See 49 CFR part 38).

Each powered, exterior side door on each such passenger car shall have a manual override device that is:

- (1) Capable of releasing the door to permit it to be opened without power from both inside and outside the car;
- (2) Located adjacent to the door which it controls; and
- (3) Designed and maintained so that a person may access the override device from both inside and outside the car without requiring the use of a tool or other implement.

(c) A railroad may protect a manual override device used to open a powered, exterior door with a cover or a screen capable of removal without requiring the use of a tool or other implement.

(d) Door exits shall be marked, and instructions provided for their use, as required by § 239.107(a) of this chapter.

[64 FR 25660, May 12, 1999, as amended at 67 FR 19991, Apr. 23, 2002]

§ 238.237 Automated monitoring.

§ 238.237 Automated monitoring.

(a) Except as further specified in this paragraph, on or after November 8, 1999 a working alerter or deadman control shall be provided in the controlling locomotive of each passenger train operating in other than cab signal, automatic train control, or automatic train stop territory. If the controlling locomotive is ordered on or after September 8, 2000, or placed into service for the first time on or after September 9, 2002, a working alerter shall be provided.

(b) Alerter or deadman control timing shall be set by the operating railroad taking into consideration maximum train speed and capabilities of the signal system. The railroad shall document the basis for setting alerter or deadman control timing and make this documentation available to FRA upon request.

(c) If the train operator does not respond to the alerter or maintain proper

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contact with the deadman control, it shall initiate a penalty brake application.

(d) The following procedures apply if the alerter or deadman control fails en route and causes the locomotive to be in non-compliance with paragraph (a):

(1)(i) A second person qualified on the signal system and trained to apply the emergency brake shall be stationed in the locomotive cab; or

(ii) The engineer shall be in constant communication with a second crewmember until the train reaches the next terminal.

(2)(i) A tag shall be prominently displayed in the locomotive cab to indicate that the alerter or deadman control is defective, until such device is repaired; and

(ii) When the train reaches its next terminal or the locomotive undergoes its next calendar day inspection, whichever occurs first, the alerter or deadman control shall be repaired or the locomotive shall be removed as the controlling locomotive in the train.

[64 FR 25660, May 12, 1999, as amended at 67 FR 19991, Apr. 23, 2002]

Subpart D—Inspection, Testing, and Maintenance Requirements for Tier I Passenger Equipment

§ 238.301 Scope.

(a) This subpart contains requirements pertaining to the inspection, testing, and maintenance of passenger equipment operating at speeds not exceeding 125 miles per hour. The requirements in this subpart address the inspection, testing, and maintenance of the brake system as well as other mechanical and electrical components covered by this part.

(b) Beginning on January 1, 2002, the requirements contained in this subpart shall apply to railroads operating Tier I passenger equipment covered by this part. A railroad may request earlier application of the requirements contained in this subpart upon written notification to FRA's Associate Administrator for Safety as provided in § 238.1(c).

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(c) Paragraphs (b) and (c) of § 238.309 shall apply beginning September 9, 1999.

[64 FR 25660, May 12, 1999, as amended at 65 FR 41307, July 3, 2000]

§ 238.303 Exterior calendar day mechanical inspection of passenger equipment.

(a) *General.*

(1) Except as provided in paragraph (f) of this section, each passenger car and each unpowered vehicle used in a passenger train shall receive an exterior mechanical inspection at least once each calendar day that the equipment is placed in service.

(2) Except as provided in paragraph (f) of this section, all passenger equipment shall be inspected as required in this section at least once each calendar day that the equipment is placed in service to ensure that the equipment conforms with the requirement contained in paragraph (e)(15) of this section.

(3) If a passenger car is also classified as a locomotive under part 229 of this chapter, the passenger car shall also receive a daily inspection pursuant to the requirements of § 229.21 of this chapter.

(b) Each passenger car and each unpowered vehicle added to a passenger train shall receive an exterior calendar day mechanical inspection in accordance with the following:

(1) Except as provided in paragraph (b)(2) of this section, each passenger car and each unpowered vehicle added to a passenger train shall receive an exterior calendar day mechanical inspection at the time it is added to the train unless notice is provided to the train crew that an exterior mechanical inspection was performed on the car or vehicle on the last day it was used in passenger service. The notice required by this section shall contain the date, time, and location of the last exterior mechanical inspection;

(2) Each express car, freight car, and each unit of intermodal equipment (e.g., RoadRailers®) added to a passenger train shall receive an exterior calendar day mechanical inspection at the time it is added to the train, unless notice is provided to the train crew that an exterior mechanical inspection