

permitted in Class 1 and excepted track.

**§ 213.137 Frogs.**

(a) The flangeway depth measured from a plane across the wheel-bearing area of a frog on Class 1 track shall not be less than 1<sup>3</sup>/<sub>8</sub> inches, or less than 1<sup>1</sup>/<sub>2</sub> inches on Classes 2 through 5 track.

(b) If a frog point is chipped, broken, or worn more than five-eighths inch down and 6 inches back, operating speed over the frog shall not be more than 10 m.p.h.

(c) If the tread portion of a frog casting is worn down more than three-eighths inch below the original contour, operating speed over that frog shall not be more than 10 m.p.h.

(d) Where frogs are designed as flange-bearing, flangeway depth may be less than that shown for Class 1 if operated at Class 1 speeds.

**§ 213.139 Spring rail frogs.**

(a) The outer edge of a wheel tread shall not contact the gage side of a spring wing rail.

(b) The toe of each wing rail shall be solidly tamped and fully and tightly bolted.

(c) Each frog with a bolt hole defect or head-web separation shall be replaced.

(d) Each spring shall have compression sufficient to hold the wing rail against the point rail.

(e) The clearance between the holddown housing and the horn shall not be more than one-fourth of an inch.

**§ 213.141 Self-guarded frogs.**

(a) The raised guard on a self-guarded frog shall not be worn more than three-eighths of an inch.

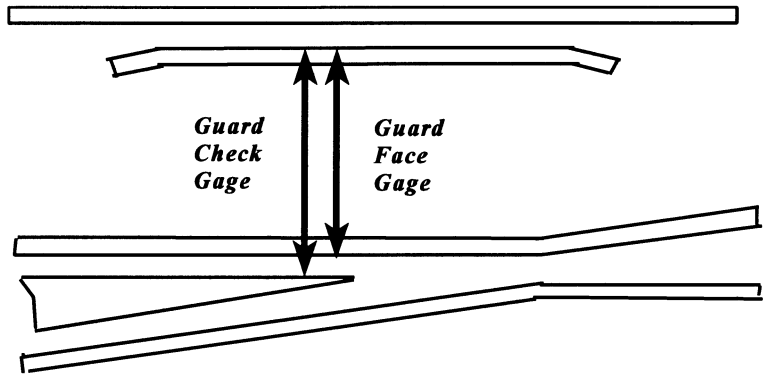
(b) If repairs are made to a self-guarded frog without removing it from service, the guarding face shall be restored before rebuilding the point.

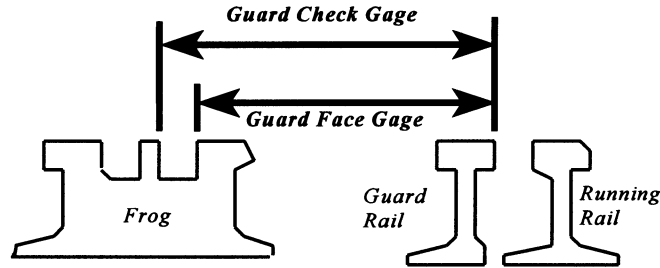
**§ 213.143 Frog guard rails and guard faces; gage.**

The guard check and guard face gages in frogs shall be within the limits prescribed in the following table—

Class of track	Guard check gage The distance between the gage line of a frog to the guard line <sup>1</sup> of its guard rail or guarding face, measured across the track at right angles to the gage line <sup>2</sup> , may not be less than—	Guard face gage The distance between guard lines <sup>1</sup> , measured across the track at right angles to the gage line <sup>2</sup> , may not be more than—
Class 1 track .....	4' 6 <sup>1</sup> / <sub>8</sub> " .....	4' 5 <sup>1</sup> / <sub>4</sub> "
Class 2 track .....	4' 6 <sup>1</sup> / <sub>4</sub> " .....	4' 5 <sup>1</sup> / <sub>8</sub> "
Class 3 and 4 track .....	4' 6 <sup>3</sup> / <sub>8</sub> " .....	4' 5 <sup>1</sup> / <sub>8</sub> "
Class 5 track .....	4' 6 <sup>1</sup> / <sub>2</sub> " .....	4' 5"

<sup>1</sup> A line along that side of the flangeway which is nearer to the center of the track and at the same elevation as the gage line.  
<sup>2</sup> A line <sup>5</sup>/<sub>8</sub> inch below the top of the center line of the head of the running rail, or corresponding location of the tread portion of the track structure.





**Subpart E—Track Appliances and Track-Related Devices**

**§213.201 Scope.**

This subpart prescribes minimum requirements for certain track appliances and track-related devices.

**§213.205 Derails.**

- (a) Each derail shall be clearly visible.
- (b) When in a locked position, a derail shall be free of lost motion which would prevent it from performing its intended function.
- (c) Each derail shall be maintained to function as intended.
- (d) Each derail shall be properly installed for the rail to which it is applied. (This paragraph (d) is applicable September 21, 1999.)

**Subpart F—Inspection**

**§213.231 Scope.**

This subpart prescribes requirements for the frequency and manner of inspecting track to detect deviations from the standards prescribed in this part.

**§213.233 Track inspections.**

- (a) All track shall be inspected in accordance with the schedule prescribed in paragraph (c) of this section by a person designated under §213.7.
- (b) Each inspection shall be made on foot or by riding over the track in a vehicle at a speed that allows the person making the inspection to visually inspect the track structure for compliance with this part. However, mechanical, electrical, and other track inspection devices may be used to supplement

visual inspection. If a vehicle is used for visual inspection, the speed of the vehicle may not be more than 5 miles per hour when passing over track crossings and turnouts, otherwise, the inspection vehicle speed shall be at the sole discretion of the inspector, based on track conditions and inspection requirements. When riding over the track in a vehicle, the inspection will be subject to the following conditions—

- (1) One inspector in a vehicle may inspect up to two tracks at one time provided that the inspector's visibility remains unobstructed by any cause and that the second track is not centered more than 30 feet from the track upon which the inspector is riding;
  - (2) Two inspectors in one vehicle may inspect up to four tracks at a time provided that the inspectors' visibility remains unobstructed by any cause and that each track being inspected is centered within 39 feet from the track upon which the inspectors are riding;
  - (3) Each main track is actually traversed by the vehicle or inspected on foot at least once every two weeks, and each siding is actually traversed by the vehicle or inspected on foot at least once every month. On high density commuter railroad lines where track time does not permit an on track vehicle inspection, and where track centers are 15 foot or less, the requirements of this paragraph (b)(3) will not apply; and
  - (4) Track inspection records shall indicate which track(s) are traversed by the vehicle or inspected on foot as outlined in paragraph (b)(3) of this section.
- (c) Each track inspection shall be made in accordance with the following schedule—