

## § 570.59

connections shall be clean. Conductor wire gauge shall not be below the brake manufacturer's minimum recommendation.

(1) *Inspection procedure.* Examine visually for conditions specified.

### § 570.59 Service brake system.

(a) *Service brake performance.* Compliance with any one of the following performance criteria will satisfy the requirements of this section. Verify that tire inflation pressure is within the limits recommended by the vehicle manufacturer before conducting either of the following tests.

(1) *Roller-type or drive-on platform tests.* The force applied by the brake on a front wheel or a rear wheel shall not differ by more than 25 percent from the force applied by the brake on the other front wheel or the other rear wheel respectively.

(i) *Inspection procedure.* The vehicle shall be tested on a drive-on platform, or a roller-type brake analyzer with the capability of measuring equalization. The test shall be conducted in accordance with the test equipment manufacturer's specifications. Note the brake force variance.

(2) *Road test.* The service brake system shall stop single unit vehicles, except truck-tractors, in a distance of not more than 35 feet, or combination vehicles and truck-tractors in a distance of not more than 40 feet, from a speed of 20 mph, without leaving a 12-foot-wide lane.

(i) *Inspection procedure.* The road test shall be conducted on a level (not to exceed plus or minus 1 percent grade), dry, smooth, hard-surfaced road that is free from loose material, oil or grease. The service brakes shall be applied at a vehicle speed of 20 mph and the vehicle shall be brought to a stop as specified. Measure the distance required to stop.

NOTE: Inspect for paragraphs (b), (c) and (d) of this section on vehicles equipped with brake inspection ports or access openings, and when removal of wheel is not required.

(b) *Disc and drum condition.* If the drum is embossed with a maximum safe diameter dimension or the rotor is embossed with a minimum safe thickness dimension, the drum or disc shall be within the appropriate specifications. These dimensions will generally

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be found on motor vehicles manufactured since January 1, 1971, and may be found on vehicles manufactured for several years prior to that time. If the drums and discs are not embossed, they shall be within the manufacturer's specifications.

(1) *Inspection procedure.* Examine visually for the condition indicated, measuring as necessary.

(c) *Friction materials.* On each brake, the thickness of the lining or pad shall not be less than one thirty-second of an inch over the fastener, or one-sixteenth of an inch over the brake shoe on bonded linings or pads. Brake linings and pads shall not have cracks or breaks that extend to rivet holes except minor cracks that do not impair attachment. The wire in wire-backed lining shall not be visible on the friction surface. Drum brake linings shall be securely attached to brake shoes. Disc brake pads shall be securely attached to shoe plates.

(1) *Inspection procedure.* Examine visually for the conditions indicated, and measure the height of the rubbing surface of the lining over the fastener heads. Measure bonded lining thickness over the surface at the thinnest point on the lining or pad.

(d) *Structural and mechanical parts.* Backing plates, brake spiders and caliper assemblies shall not be deformed or cracked. System parts shall not be broken, misaligned, missing, binding, or show evidence of severe wear. Automatic adjusters and other parts shall be assembled and installed correctly.

(1) *Inspection procedure.* Examine visually for conditions indicated.

### § 570.60 Steering system.

(a) *System play.* Lash or free play in the steering system shall not exceed the values shown in Table 2.

(1) *Inspection procedure.* With the engine on and the steering axle wheels in the straight ahead position, turn the steering wheel in one direction until there is a perceptible movement of the wheel. If a point on the steering wheel rim moves more than the value shown in Table 1 before perceptible return movement of the wheel under observation, there is excessive lash or free play in the steering system.