

four springs. Shock absorber mountings, shackles, and U-bolts shall be securely attached. Rubber bushings shall not be cracked, extruded out from or missing from suspension joints. Radius rods shall not be missing or damaged.

(1) *Inspection procedure.* Examine front and rear end suspension parts for conditions indicated.

(b) *Shock absorber condition.* There shall be no oil on the shock absorber housing attributable to leakage by the seal, and the vehicle shall not continue free rocking motion for more than two cycles.

(1) *Inspection procedure.* Examine shock absorbers for oil leaking from within, then with vehicle on a level surface, push down on one end of vehicle and release. Note number of cycles of free rocking motion. Repeat procedure at other end of vehicle.

[38 FR 23950, Sept. 5, 1973, as amended at 44 FR 68470, Nov. 29, 1979]

**§ 570.9 Tires.**

(a) *Tread depth.* The tread on each tire shall be not less than two thirty-seconds of an inch deep.

(1) *Inspection procedure.* Passenger car tires have tread depth indicators that become exposed when tread depth is less than two thirty-seconds of an inch. Inspect for indicators in any two adjacent major grooves at three locations spaced approximately equally around the outside of the tire. For vehicles other than passenger cars, it may be necessary to measure tread depth with a tread gauge.

(b) *Type.* Vehicle shall be equipped with tires on the same axle that are matched in tire size designation, construction, and profile.

(1) *Inspection procedures.* Examine visually. A major mismatch in tire size designation, construction, and profile between tires on the same axle, or a major deviation from the size as recommended by the manufacturer (e.g., as indicated on the glove box placard on 1968 and later passenger cars) are causes for rejection.

(c) *General condition.* Tires shall be free from chunking, bumps, knots, or bulges evidencing cord, ply, or tread separation from the casing or other adjacent materials.

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

(d) *Damage.* Tire cords or belting materials shall not be exposed, either to the naked eye or when cuts or abrasions on the tire are probed.

(1) *Inspection procedures.* Examine visually for conditions indicated, using a blunt instrument if necessary to probe cuts or abrasions.

[38 FR 23950, Sept. 5, 1973, as amended at 39 FR 12868, Apr. 9, 1974; 39 FR 19781, June 4, 1974]

**§ 570.10 Wheel assemblies.**

(a) *Wheel integrity.* A tire rim, wheel disc, or spider shall have no visible cracks, elongated bolt holes, or indication of repair by welding.

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

(b) *Deformation.* The lateral and radial runout of each rim bead area shall not exceed one-eighth of an inch of total indicated runout.

(1) *Inspection procedure.* Using a runout indicator gauge, and a suitable stand, measure lateral and radial runout of rim bead through one full wheel revolution and note runout in excess of one-eighth of an inch.

(c) *Mounting.* All wheel nuts and bolts shall be in place and tight.

(1) *Inspection procedure.* Check wheel retention for conditions indicated.

[38 FR 23950, Sept. 5, 1973, as amended at 39 FR 12868, Apr. 9, 1974]

**Subpart B—Vehicles With GVWR of More Than 10,000 Pounds**

SOURCE: 39 FR 26027, July 16, 1974, unless otherwise noted.

**§ 570.51 Scope.**

This part specifies standards and procedures for the inspection of brake, steering and suspension systems, and tire and wheel assemblies, of motor vehicles in use with a gross vehicle weight rating of more than 10,000 pounds.

**§ 570.52 Purpose.**

The purpose of this part is to establish criteria for the inspection of motor vehicles through State inspection programs, in order to reduce deaths and

### § 570.53

injuries attributable to failure or inadequate performance of the motor vehicle systems covered by this part.

#### § 570.53 Applicability.

This part does not in itself impose requirements on any person. It is intended to be implemented by States through the highway safety program standards issued under the Highway Safety Act (23 U.S.C. 402) with respect to inspection of motor vehicles with gross vehicle weight rating greater than 10,000 pounds, except mobile structure trailers.

[39 FR 28980, Aug. 13, 1974]

#### § 570.54 Definitions.

Unless otherwise indicated, all terms used in this part that are defined in part 571 of this chapter, Motor Vehicle Safety Standards, are used as defined in that part.

*Air-over-hydraulic brake subsystem* means a subsystem of the air brake that uses compressed air to transmit a force from the driver control to a hydraulic brake system to actuate the service brakes.

*Electric brake system* means a system that uses electric current to actuate the service brake.

*Vacuum brake system* means a system that uses a vacuum and atmospheric pressure for transmitting a force from the driver control to the service brake, but does not include a system that uses vacuum only to assist the driver in applying muscular force to hydraulic or mechanical components.

#### § 570.55 Hydraulic brake system.

The following requirements apply to vehicles with hydraulic brake systems.

(a) *Brake system failure indicator.* The hydraulic brake system failure indicator lamp, if part of a vehicle's original equipment, shall be operable.

(1) *Inspection procedure.* Apply the parking brake and turn the ignition to start to verify that the brake system failure indicator lamp is operable, or verify by other means recommended by the vehicle manufacturer.

(b) *Brake system integrity.* The hydraulic brake system shall demonstrate integrity as indicated by no perceptible decrease in pedal height under a 125-

### 49 CFR Ch. V (10-1-06 Edition)

pound force applied to the brake pedal and by no illumination of the brake system failure indicator lamp. The brake system shall withstand the application of force to the pedal without failure of any tube, hose or other part.

(1) *Inspection procedure.* With the engine running in vehicles equipped with power brake systems and the ignition turned to "on" in other vehicles, apply a force of 125 pounds to the brake pedal and hold for 10 seconds. Note any additional decrease in pedal height after the initial decrease, and whether the brake system failure indicator lamp illuminates.

(c) *Brake pedal reserve.* When the brake pedal is depressed with a force of 50 pounds, the distance that the pedal has traveled from its free position shall be not greater than 80 percent of the total distance from its free position to the floorboard or other object that restricts pedal travel. The brake pedal reserve test is not required for vehicles with brake systems designed by the original vehicle manufacturer to operate with greater than 80 percent pedal travel.

(1) *Inspection procedure.* Measure the distance (i) from the free pedal position to the floor board or other object that restricts brake pedal travel. Depress the brake pedal, and with the force applied measure the distance (ii) from the depressed pedal position to the floor board or other object that restricts pedal travel. Determine the pedal travel percentage as

$$[(A - B) / A] \times 100$$

The engine must be operating when power-assisted brakes are checked.

(d) *Brake hoses, master cylinder, tubes and tube assemblies.* Hydraulic brake hoses shall not be mounted so as to contact the vehicle body or chassis. Hoses shall not be cracked, chafed, or flattened. Brake tubes shall not be flattened or restricted. Brake hoses and tubes shall be attached or supported to prevent damage by vibration or abrasion. Master cylinder shall not show signs of leakage. Hose or tube protective rings or devices shall not be considered part of the hose or tubing.

(1) *Inspection procedure.* Examine visually brake master cylinder, hoses and tubes, including front brake hoses,