

Subchapter L

ANIMAL-DRAWN VEHICLES, IMPLEMENTS OF HUSBANDRY AND SPECIAL MOBILE EQUIPMENT

175.221. Application of Subchapter

Equipment standards set forth in this subchapter shall apply to all animal-drawn vehicles, implements of husbandry and special mobile equipment driven on highways.

175.222. Steering

- (a) **Condition of Steering Components** - The steering assembly and steering mechanism shall be in safe operating condition as prescribed in this subchapter.
- (b) **Steering Wheel** - The steering wheel, if so equipped, must be equivalent to the original equipment in material, strength and size. A modification affecting the steering of vehicle must be corrected.
- (c) **Frame** - The frame may not be bent in such a manner as to affect the steering.

175.223. Braking Systems

- (a) **Condition of Braking Systems** - Braking systems and components shall be in safe operating condition as described in this subchapter.
- (b) **Service Brakes** - A vehicle specified under this subchapter shall be equipped with service brake system. This section shall not apply to nonself-propelled special mobile equipment having a gross weight which does not exceed 40% of the gross weight of the towing vehicle, or to a towed implement of husbandry.
 - (1) The service brake system shall be adequate to control movement and stop and hold the vehicle or combination on any grade on which it is operated under all conditions of loading.
 - (2) A service brake system shall act upon wheels according to the original manufacturer's specifications.
 - (3) The brake lining and fluids utilized in the braking function shall be of a type approved by the vehicle manufacturer.
- (c) **Parking Brake System** - A vehicle shall be equipped with a parking brake system except a towed implement of husbandry and towed special mobile equipment. See 75 Pa.C.S. §4502 (relating to general requirements for braking systems). A parking brake system shall be adequate to hold the vehicle on a surface free from ice or snow on 20% grade.
- (d) **Breakaway System** - A trailer operated on the highway, except a towed implement of husbandry, which is equipped with brakes or has a gross weight in excess of 3,000 pounds shall be equipped with a breakaway system which shall stop and hold the vehicle automatically upon breakaway from the towing vehicle.

175.224. Tires and Wheels

- (a) **Condition of Tires and Wheels** - Tires and wheels or traction surfaces shall be in safe operating condition as described in this subchapter.
- (b) **Tire Standards**
 - (1) If of pneumatic type, the tires shall be operated at a cold inflation pressure no less than that specified for the load being carried.
 - (2) The tires shall meet the minimum manufacturer specifications as to tire size and shall be free of defective conditions reasonably believed to render the tire unsafe for highway use.
 - (3) The wheel nuts, bolts, clamps or lugs shall have proper thread engagement; and wheels shall not be bent, cracked or damaged in such a way as to affect safe operation of vehicle.
- (c) **Nonpneumatic Tires** - A vehicle equipped with nonpneumatic tires shall meet the following requirements:
 - (1) An implement of husbandry or special mobile equipment shall not be equipped with cleats or guide bands

which come in contact with the highway of a greater height or less width than that specified for classes and gross weights as follows- except caterpillar or crawler type vehicles:

Gross Weight in Pounds	Cleats		Guide Bands	
	Max. Height	Min. Width	Max. Height	Min. Width
Less than 12,000	2"	3/8"	1 1/2"	2"
12,000 and over	2"	1"	1 1/2"	2"

- (2) When cleats are placed diagonally across the face of the driving surface or placed in two sections similar to the letter "V," cleats shall be spaced so as not to exceed 9 inches from center to center, measured at right angles to the cleats. When the cleats are placed on the driving surface in two sections—standard type of cleat mounting—sections shall be spaced so as not to exceed 7 1/2 inches from the center measured at right angles to the cleats. The cleats and guide bands shall have a flat surface with rounded edges.
- (3) An implement of husbandry or special mobile equipment shall not be equipped with caterpillar or crawler type cleats or grousers or guide bands—which come in contact with highway of greater height or less width than specified for classes and gross weights as follows:

Gross Weight in Pounds	Cleats		Guide Bands	
	Max. Height	Min. Width	Max. Height	Min. Width
Less than 7,500	2"	1"	1 1/2"	2"
7,500 and over but less than 12,000	2"	1 1/2"	1 1/2"	2"
12,000 and over	2"	2"	1 1/2"	2"

- (4) The cleats or grousers on a caterpillar or crawler type tractors shall have a flat surface with rounded edges; shall be placed at right angles to front to rear axis of the vehicle, so arranged that five or more cleats on each traction surface shall be in road contact with highway; and shall not be less than 3/4 of the width of the tread or driving surface.
- (5) An animal-drawn vehicle is permitted non-pneumatic tires.
- (d) **Alignment** - Tires or wheels may not be out of alignment to such a degree that steering control is affected.
- (e) **Tires and Rims** - The axles of a vehicle specified under this subchapter shall be equipped with tires and rims as originally designed.

175.225. Lighting and Electrical Systems

- (a) **Condition of Lamps and Switches** - Every required lamp or switch shall be in safe operating condition as described in this subchapter.
- (b) **Lighting Standards** - An external lighting system shall meet the requirements of this subchapter.
- (c) **Headlamp System** - An animal-drawn vehicle, implement of husbandry, or special mobile equipment operated on the highway between sunset and sunrise or during periods of reduced visibility or insufficient illumination shall be equipped with the following lamps:
 - (1) A self-propelled implement of husbandry and special mobile equipment shall be equipped with at least a two-headlamp system.
 - (2) At least one lamp shall be located on each side of the vehicle centerline.
 - (3) At a distance of 75 feet, the high intensity portion of the beam shall not be higher than 42 inches above level ground upon which vehicle stands.
 - (4) A vehicle with a headlamp system shall have a manual dimmer switch, as originally equipped, conveniently located for use by the driver while in a normal operating position. An automatic dimming devices may be used in addition to a manual switch.

- (5) A vehicle with a headlamp system shall have a beam indicator, as originally equipped, which shall be lighted whenever the high beam of light from the headlamp is in use and shall not otherwise be lighted. The indicator shall be located so that when lighted it is readily visible without glare to the operator of vehicle.
- (6) A vehicle shall not have auxiliary equipment so placed as to obstruct beam.
- (e) **Other Required Lamps** - A vehicle specified under this subchapter operated on the highway between sunset and sunrise or during periods of reduced visibility, or insufficient illumination shall be equipped with all of the following:
 - (1) One red reflex reflector or reflective tape with a minimum of 3 square inches of surface on rear of each side of vehicle.
 - (2) One amber reflex reflector or reflective tape with a minimum of 3 square inches of surface on front of each side of vehicle.
 - (3) One double-faced—amber to front, red to rear—hazard lamp on each side of the vehicle or two amber hazard warning lamps on front and two red hazard warning lamps on the rear of vehicle.
- (f) **Illumination** - Lamps shall direct light properly and not be of a color contrary to law.
- (g) **Battery Fastening** - A vehicle specified under this subchapter shall be equipped with a system for secure fastening of the battery, if applicable.

175.226. Glazing

- (a) **Condition of Glazing** - Glazing shall meet requirements of Chapter 161 (relating to glazing materials). See 75 Pa.C.S. §4526 (relating to safety glass).
- (b) **Stickers** - Out-of-state inspection stickers, tax stamps, road use permits or other government-related permits—all municipalities and states shall be placed at the lower left or right-hand corner of the windshield.
- (c) **Obstructions** - Vehicle glazing shall be free from obstructions as described in this subchapter. No sign, poster or other material may be placed on the windshield or front side windows so as to obstruct, obscure or impair the driver's clear view of the highway or an intersecting highway.
- (d) **Sun Screening Devices** - A sun screening device or other material which does not permit a person to see or view the inside of the vehicle is prohibited unless a certificate of exemption has been issued in compliance with §175.265 (relating to exemption provisions). This subsection applies only to motor vehicles. See Table X for specific requirements for vehicles subject to this subchapter.

175.227. Mirrors

- (a) **Condition of Mirrors** - Mirrors shall be in safe operating condition as described in this subchapter.
- (b) **Rearview Mirrors** - A vehicle—except a trailer, implement of husbandry and special mobile equipment not originally so equipped—when operated on highway shall be equipped with at least one rearview mirror or similar device which provides the driver an unobstructed view of the highway to the rear of the vehicle for a distance of not less than 200 feet. A mirror shall not be broken, cracked, or discolored.

175.228. Fuel Systems

- (a) **Condition of Fuel Systems** - All components in a fuel system shall be in safe operating condition as described in this subchapter.
- (b) **Fuel System Requirements** - The fuel system components shall be leakproof and shall be fastened securely to the vehicle with fasteners designed for that purpose.
- (c) **Accelerator Operation** - The accelerator control system shall return the engine throttle to idle position when operator removes actuating force from accelerator control or shall be as originally equipped.
- (d) **Alternate Fuel Systems** - See Subchapter M (relating to alternate fuel systems and controls).

175.229. Exhaust Systems

- (a) **Condition of Exhaust System** - All components of an exhaust system shall be in safe operating condition as described in this subchapter.
- (b) **Exhaust System Requirements** - A vehicle shall be constructed, equipped, maintained and operated so as to prevent the engine exhaust gases from penetrating and collecting in any part of the vehicle occupied by the driver or passenger.
- (c) **Mufflers** - A vehicle specified under this subchapter shall be equipped with a muffler or other noise-suppressing system in good working order and in constant operation, if applicable. No muffler or exhaust system shall be equipped with a cutout, bypass or similar device, and no muffler shall show evidence of external repair.

175.230. Horns and Warning Devices

- (a) **Condition of Horns and Warning Devices** -All components of a horn or warning device shall be in safe operating condition as described in this subchapter.
- (b) **Horn and Warning Device Requirements** -A vehicle, except a trailer, implement of husbandry and special mobile equipment not originally equipped shall have a horn or other warning device which is audible under normal conditions at distance of not less than 200 feet.