

§ 393.23

(3) A clearance lamp must not be combined optically with a tail lamp or identification lamp.

[39 FR 26908, July 24, 1974]

§ 393.23 Lighting devices to be electric.

Lighting devices shall be electric, except that red liquid-burning lanterns may be used on the end of loads in the nature of poles, pipes, and ladders projecting to the rear of the motor vehicle.

§ 393.24 Requirements for head lamps and auxiliary road lighting lamps.

(a) *Mounting.* Head lamps and auxiliary road lighting lamps shall be mounted so that the beams are readily adjustable, both vertically and horizontally, and the mounting shall be such that the aim is not readily disturbed by ordinary conditions of service.

(b) *Head lamps required.* Every bus, truck, and truck tractor shall be equipped with a headlighting system composed of at least two head lamps, not including fog or other auxiliary lamps, with an equal number on each side of the vehicle. The headlighting system shall provide an upper and lower distribution of light, selectable at the driver's will.

(c) *Fog, adverse-weather, and auxiliary road-lighting lamps.* For the purposes of this section, fog, adverse-weather, and auxiliary road lighting lamps, when installed, are considered to be a part of the headlighting system. Such lamps may be used in lieu of head lamps under conditions making their use advisable if there be at least one such lamp conforming to the appropriate SAE Standard¹ for such lamps on each side of the vehicle.

¹Wherever reference is made in these regulations to SAE Standards or SAE Recommended Practices, they shall be:

(a) As found in the 1985 edition of the SAE Handbook with respect to parts and accessories other than lighting devices and reflectors.

(b) When reference is made in these regulations to SAE Standards or SAE Recommended Practices, they shall be as found in the 1985 edition of the SAE Handbook:

(1) With respect to parts and accessories other than lighting devices and reflectors:

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(d) *Aiming and intensity.* Head lamps shall be constructed and installed so as to provide adequate and reliable illumination and shall conform to the appropriate specification set forth in the SAE Standards¹ for "Electric Head Lamps for Motor Vehicles" or "Sealed-Beam Head Lamp Units for Motor Vehicles."

[33 FR 19735, Dec. 25, 1968, as amended at 41 FR 53031, Dec. 3, 1976; 53 FR 49397, Dec. 7, 1988]

§ 393.25 Requirements for lamps other than head lamps.

(a) *Mounting.* All lamps shall be permanently and securely mounted in workmanlike manner on a permanent part of the motor vehicle, except that temporary lamps on motor vehicles being transported in driveaway-towaway operations and temporary electric lamps on projecting loads need not be permanently mounted nor mounted on a permanent part of the vehicle. The requirement for three identification lamps on the centerline of a vehicle will be met as to location by one lamp on the centerline, with the other two at right and left. All temporary lamps must be firmly attached.

(b) *Visibility.* All required exterior lamps shall be so mounted as to be capable of being seen at all distances between 500 feet and 50 feet under clear atmospheric conditions during the time lamps are required to be lighted. The light from front clearance and front identification lamps shall be visible to the front, that from sidemarker lamps to the side, that from rear clearance, rear identification, and tail lamps to the rear, and that from projecting loadmarker lamps from those directions required by § 393.11. This shall not be construed to apply to lamps on one unit which are obscured by another unit of a combination of vehicles.

(c) *Specifications.* All required lamps except those already installed on vehicles tendered for transportation in

(2) Lighting devices and reflectors on motor vehicles manufactured on and after March 7, 1990, shall conform to FMVSS 571.108 (49 CFR 571.108) in effect at the time of manufacture of the vehicle. Should a conflict arise between FMVSS 571.108 and a SAE Standard, FMVSS 571.108 will prevail.

driveaway and towaway operations shall conform to appropriate requirements of the SAE Standards and/or Recommended Practices¹ as indicated below, except that the minimum required marking of lamps conforming to the 1985 requirements shall be as specified in paragraph (d) of this section. Projecting load marker lamps shall conform to the requirements for clearance, side-marker, and identification lamps. Turn signals shall conform to the requirements for class A, Type I turn signals, provided.

(1) Lamps on vehicles made before July 1, 1961, excepting replacement lamps as specified in paragraph (c)(2) of this section, shall conform to the 1952 requirements.

(2) Lamps on vehicles made on and after July 1, 1961, and replacement lamps installed on and after December 31, 1961, shall conform to the 1985 requirements.

(3) Lamps temporarily attached to vehicles transported in driveaway and towaway operations on and after December 31, 1961, shall conform to the 1985 requirements.

(d) *Certification and markings.* All lamps required to conform to the requirements of the SAE Standards¹ shall be certified by the manufacturer or supplier that they do so conform, by markings indicated below. The markings in each case shall be visible when the lamp is in place on the vehicle.

(1) Stop lamps shall be marked with the manufacturer's or supplier's name or trade name and shall be marked "SAE-S".

(2) Turn signal units shall be marked with the manufacturer's or supplier's name or trade name and shall be marked "SAE-AI" or "SAE-I".

(3) Tail lamps shall be marked with the manufacturer's or supplier's name or trade name and shall be marked "SAE-T".

(4) Clearance, side marker, identification, and projecting load-marker lamps, except combination lamps, shall be marked with the manufacturer's or supplier's name or trade name and shall be marked "SAE" or "SAE-P".

(5) Combination lamps shall be marked with the manufacturer's or supplier's name or trade name and shall be marked "SAE" followed by the appropriate letters indicating the individual lamps combined. The letter "A", as specified in §393.26(c), may be included to certify that a reflector in the combination conforms to the requirements appropriate to such marking. If the letter "I" follows the letter "A" immediately the two letters shall be deemed to refer to a turn signal unit, as specified in paragraph (d)(2) of this section. Combination clearance and side marker lamps may be marked "SAE-PC".

(e) *Lighting devices to be steady-burning.* All exterior lighting devices shall be of the steady-burning type except turn signals on any vehicle, stop lamps when used as turn signals, warning lamps on school buses when operating as such, and warning lamps on emergency and service vehicles authorized by State or local authorities, and except that lamps combined into the same shell or housing with any turn signal may be turned off by the same switch that turns the signal on for flashing and turned on again when the turn signal as such is turned off. This paragraph shall not be construed to prohibit the use of vehicular hazard warning signal flashers as required by §392.22 or permitted by §392.18.

(f) *Stop lamp operation.* All stop lamps on each motor vehicle or combination of motor vehicles shall be actuated upon application of any of the service brakes, except that such actuation is not required upon activation of the emergency feature of trailer brakes by means of either manual or automatic control on the towing vehicle, and except that stop lamps on a towing vehicle need not be actuated when service brakes are applied to the towed vehicles or vehicles only, and except that no stop lamp need be actuated as such when it is in use as a turn signal or when it is turned off by the turn signal switch as provided in paragraph (e) of this section.

[33 FR 19735, Dec. 25, 1968, as amended at 48 FR 57139, Dec. 28, 1983; 53 FR 49397, Dec. 7, 1988; 61 FR 1843, Jan. 24, 1996]

¹See footnote 1 to §393.24(c).

¹See footnote 1 to §393.24(c).