(b) **Prohibited combinations.** (1) A turn signal lamp must not be combined optically with either a head lamp or other lighting device or combination of lighting devices that produces a greater intensity of light than the turn signal lamp.

(2) A turn signal lamp must not be combined optically with a stop lamp unless the stop lamp function is always deactivated when the turn signal function is activated.

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

§ 393.23 **Power supply for lamps.**

All required lamps must be powered by the electrical system of the motor vehicle with the exception of battery powered lamps used on projecting loads.

§ 393.24 **Requirements for head lamps, auxiliary driving lamps and front fog lamps.**

(a) **Headlamps.** Every bus, truck and truck tractor shall be equipped with headlamps as required by § 393.11(a). The headlamps shall provide an upper and lower beam distribution of light, selectable at the driver’s will and be steady-burning. The headlamps shall be marked in accordance with FMVSS No. 108. Auxiliary driving lamps and/or front fog lamps may not be used to satisfy the requirements of this paragraph.

(b) **Auxiliary driving lamps and front fog lamps.** Commercial motor vehicles may be equipped with auxiliary driving lamps and/or front fog lamps for use in conjunction with, but not in lieu of the required headlamps. Auxiliary driving lamps shall meet SAE Standard J581—Auxiliary Upper Beam Lamps, July 2004, and front fog lamps shall meet SAE Standard J583—Front Fog Lamp, August 2004. (See §393.7 for information on the incorporation by reference and availability of these documents.)

(c) **Mounting.** Headlamps shall be mounted and aimable in accordance with FMVSS No. 108. Auxiliary driving lamps and front fog lamps shall be mounted so that the beams are aimable and the mounting shall prevent the aim of the lighting device from being disturbed while the vehicle is operating on public roads.

(d) **Aiming.** Headlamps, auxiliary driving lamps and front fog lamps shall be aimed to meet the aiming specifications in FMVSS No. 108 (49 CFR 571.108), SAE J581, and SAE J583, respectively. (70 FR 48046, Aug. 15, 2005)

§ 393.25 **Requirements for lamps other than head lamps.**

(a) **Mounting.** All lamps shall be securely mounted on a rigid part of the vehicle. Temporary lamps must be securely mounted to the load and are not required to be mounted to a permanent part of the vehicle.

(b) **Visibility.** Each lamp shall be located so that it meets the visibility requirements specified by FMVSS No. 108 in effect at the time of manufacture of the vehicle. Vehicles which were not subject to FMVSS No. 108 at the time of manufacture shall have each lamp located so that it meets the visibility requirements specified in the SAE standards listed in paragraph (c) of this section. If motor vehicle equipment (e.g., mirrors, snow plows, wrecker booms, backhoes, and winches) prevents compliance with this paragraph by any required lamp, an auxiliary lamp or device meeting the requirements of this paragraph shall be provided. 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 marker lamps on projecting loads, lamps which are temporarily attached to vehicles transported in driveaway-towaway operations, and lamps on converter dollies and pole trailers) on vehicles manufactured on or after December 25, 1968, shall, at a minimum, meet the applicable requirements of FMVSS No. 108 in effect on the date of manufacture of the vehicle. Marker lamps on projecting loads, all lamps which are temporarily attached to vehicles transported in driveaway-towaway operations, and all lamps on converter dollies and pole trailers must meet the following applicable SAE standards: J586—Stop Lamps for Use on
§ 393.26 Requirements for reflectors.

(a) Mounting. Reflex reflectors shall be mounted at the locations required by §393.11. In the case of motor vehicles so constructed that requirement for a 381 mm (15-inch) minimum height above the road surface is not practical, the reflectors shall be mounted as close as practicable to the required mounting height range. All permanent reflex reflectors shall be securely mounted on a rigid part of the vehicle. Temporary reflex reflectors on projecting loads must be securely mounted to the load and are not required to be permanently mounted to a part of the vehicle. Temporary reflex reflectors on vehicles transported in driveaway-towaway operations must be firmly attached.

(b) Specifications. All required reflex reflectors (except reflex reflectors on projecting loads, vehicles transported in a driveaway-towaway operation, converter dollies and pole trailers) on vehicles manufactured on or after December 25, 1968, shall meet the applicable requirements of FMVSS No. 108 in effect on the date of manufacture of the vehicle. Reflex reflectors on projecting loads, vehicles transported in a driveaway-towaway operation, and all reflex reflectors on converter dollies and pole trailers must conform to SAE J594—Reflex Reflectors, December 2003.

(c) Substitute material for side reflex reflectors. Reflective material conforming to ASTM D 4956–04, Standard Specification for Retroreflective Sheeting for Traffic Control, may be used in lieu of reflective reflectors if the material as used on the vehicle, meets the performance standards in either Table I of SAE J594 or Table IA of SAE J594—Reflex Reflectors, December 2003. (See §393.7(b) for information on the incorporation by reference and availability of these documents.)

(d) Use of additional retroreflective surfaces. Additional retroreflective surfaces may be used in conjunction with, but not in lieu of the reflex reflectors required in subpart B of part 393, and the substitute material for side reflex

Motor Vehicles Less Than 2032 mm in Overall Width, March 2000; J2261 Stop Lamps and Front- and Rear-Turn Signal Lamps for Use on Motor Vehicles 2032 mm or More in Overall Width, January 2002; J586—Tail Lamps (Rear Position Lamps) for Use on Motor Vehicles Less Than 2032 mm in Overall Width, March 2000; J588—Turn Signal Lamps for Use on Motor Vehicles Less Than 2032 mm in Overall Width, March 2000; J2040—Tail Lamps (Rear Position Lamps) for Use on Vehicles 2032 mm or More in Overall Width, March 2002; J592—Sidemarker Lamps for Use on Road Vehicles Less Than 2032 mm in Overall Width, August 2000. (See §393.7 for information on the incorporation by reference and availability of these documents.)

(d) (Reserved)

(e) Lamps to be steady-burning. All exterior lamps (both required lamps and any additional lamps) shall be steady-burning with the exception of turn signal lamps; hazard warning signal lamps; school bus warning lamps; amber warning lamps or flashing warning lamps on tow trucks and commercial motor vehicles transporting oversized loads; and warning lamps on emergency and service vehicles authorized by State or local authorities. Lamps combined into the same shell or housing with a turn signal are not required to be steady burning while the turn signal is in use. Amber warning lamps must meet SAE J845—Optical Warning Devices for Authorized Emergency, Maintenance and Service Vehicles, January 2005. Amber gaseous discharge warning lamps must meet SAE J1318 Gaseous Discharge Warning Lamp for Authorized Emergency, Maintenance, and Service Vehicles, May 1997. Amber flashing warning lamps must meet SAE J595—Directional Flashing Optical Warning Devices for Authorized Emergency, Maintenance and Service Vehicles, January 2005. Amber gaseous discharge warning lamps must meet SAE J1318 Gaseous Discharge Warning Lamp for Authorized Emergency, Maintenance, and Service Vehicles, May 1998. (See §393.7(b) for information on the incorporation by reference and availability of these documents.)

(f) Stop lamp operation. The stop lamps on each vehicle shall be activated upon application of the service brakes. The stop lamps are not required to be activated when the emergency feature of the trailer brakes is used or when the stop lamp is optically combined with the turn signal and the turn signal is in use.

[70 FR 48047, Aug. 15, 2005]