

CHAPTER 347

EQUIPMENT OF VEHICLES

GENERAL PROVISIONS	
347.01	Words and phrases defined.
347.02	Applicability of chapter.
347.03	Sale of prohibited equipment unlawful.
347.04	Owner responsible for improperly equipped vehicle.
347.05	Reciprocity agreements as to equipment.
LIGHTING EQUIPMENT	
347.06	When lighted lamps required.
347.07	Special restrictions on lamps and the use thereof.
347.08	Determining the visibility distance and mounted height of lamps.
347.09	Headlamps on motor vehicles.
347.10	Headlamp specifications for motor vehicles other than mopeds and motor bicycles.
347.11	Headlamp specifications for mopeds and motor bicycles.
347.115	Modulating headlamps for motorcycles, motor bicycles or mopeds.
347.12	Use of multiple-beam headlamps.
347.13	Tail lamps and registration plate lamps.
347.14	Stop lamps.
347.145	Deceleration warning lights for motorcycles, motor bicycles or mopeds.
347.15	Direction signal lamps or devices.
347.16	Clearance lamps and reflectors.
347.17	Color of clearance and marker lamps and reflectors.
347.18	Mounting of clearance lamps and reflectors.
347.19	Visibility of clearance lamps and reflectors.
347.20	Lamp or flag on projecting load or fixture.
347.21	Lamps and flags on trains of agricultural vehicles.
347.22	Lamps on farm tractors and self-propelled farm implements.
347.23	Lamps on highway maintenance equipment.
347.24	Lamps on nonmotor vehicles and equipment.
347.245	Identification emblem on certain slow moving vehicles.
347.25	Special warning lamps on emergency vehicles, school buses and funeral vehicles.
347.255	Auxiliary lamps on emergency vehicles used to activate traffic control signal preemption devices.
347.26	Restrictions on certain optional lighting equipment.
347.27	When lighted lamps required on parked vehicles.
347.28	Certain vehicles to carry flares or other warning devices.
347.29	Display of warning devices for certain vehicles when standing on highway.
347.30	Penalty for violating lighting equipment requirements.
OTHER EQUIPMENT	
347.35	Brakes.
347.36	Performance ability of brakes.
347.37	Brake fluid, sale regulation.
347.38	Horns and warning devices.
347.39	Mufflers.
347.40	Mirrors.
347.41	Speed indicators.
347.415	Odometer tampering.
347.42	Windshield wipers.
347.43	Safety glass.
347.44	Painting requirements for school buses; restrictions as to painting of other vehicles.
347.45	Tire equipment.
347.455	Modifications to height of vehicle.
347.46	Fenders and mudguards.
347.47	Drawbars, trailer hitches and mobile home couplings.
347.48	Safety belts and child safety restraint systems.
347.485	Protective headgear for motorcyclists.
347.486	General requirements.
347.487	Seating requirements.
347.488	Moped equipment.
347.489	Lamps and other equipment on bicycles and motor bicycles.
347.49	Equipment of vehicles transporting flammable liquids.
347.50	Penalties.

GENERAL PROVISIONS

347.01 Words and phrases defined. Words and phrases defined in s. 340.01 are used in the same sense in this chapter unless a different definition is specifically provided.

347.02 Applicability of chapter. (1) No provision of this chapter requiring vehicles to be equipped in a particular manner is applicable to any of the following vehicles unless the vehicle is expressly included within or made subject to the particular provision:

- (a) Farm tractors and self-propelled farm implements;
- (b) Implements of husbandry;
- (c) Vehicles drawn by animals;
- (d) Road machinery;
- (e) Bicycles.

(f) Trackless trolley buses purchased prior to July 1, 1958.

(g) Motor bicycles.

(h) Golf carts operated in accordance with s. 349.18 (3).

(2) No provision of this chapter requiring or prohibiting certain types of equipment on a vehicle is applicable when such vehicle is not operated upon or occupying a highway.

(2m) (a) No provision of this chapter requiring or prohibiting certain types of equipment on a vehicle is applicable to an imported vehicle which has been granted entry into the United States by the federal government solely for the purpose of test or experiment.

(b) The exemption under par. (a) is limited to the one-year period following the entry of the vehicle.

(3) Nothing in this chapter shall be construed to prohibit the use of additional parts and

347.02 EQUIPMENT OF VEHICLES

4112

accessories on any vehicle not inconsistent with this chapter.

(4) Beginning July 1, 1960, the provisions of this chapter covering lighting shall be applicable to all state, county and municipal trucks, truck tractors, trailers and semitrailers.

(5) If a vehicle registered under s. 341.25 (1) (a), 341.265 or 341.266 has equipment which was designated by the manufacturer as optional equipment in the model year the vehicle was manufactured, it is not necessary for such equipment to be in operating condition unless it replaces equipment which is required by law to be both present and functioning.

(6) Notwithstanding the requirements of this chapter, the department may establish special equipment standards for vehicles operated under s. 343.135 which differ from the equipment standards established under this chapter. Equipment standards established under this subsection may not be less stringent than any federal standards established for the vehicle.

History: 1977 c. 39; 1979 c. 345; 1981 c. 275; 1983 a. 243, 288, 538.

347.03 Sale of prohibited equipment unlawful. No person shall sell for highway use any device, appliance, accessory or replacement part the use of which on a motor vehicle is unlawful.

347.04 Owner responsible for improperly equipped vehicle. Any owner of a vehicle not equipped as required by this chapter who knowingly causes or permits such vehicle to be operated on a highway in violation of this chapter is guilty of the violation the same as if he had operated the vehicle himself. No demerit points shall be assessed or counted pursuant to s. 343.32 against the operator's or chauffeur's license of the owner of the vehicle on account of or by reason of his guilt or conviction of any such violation unless he was personally operating the vehicle at the time of the violation.

347.05 Reciprocity agreements as to equipment. (1) The secretary, with the approval of the governor, is authorized to enter into reciprocal agreements with the duly authorized representatives of other jurisdictions exempting the residents of those jurisdictions from details of vehicle equipment requirements of this state which are particularly burdensome to residents of such other jurisdictions operating vehicles in this state, provided the law of such other jurisdiction requires vehicles to be equipped in a manner rendering them substantially as safe as those equipped in the manner required by the laws of this state. The agreements shall provide substantially like exemptions for residents of

this state when operating vehicles in such other jurisdiction.

(2) This section does not authorize reciprocity agreements as to laws governing the size and weight of vehicles.

History: 1977 c. 29 s. 1654 (7) (c).

LIGHTING EQUIPMENT

347.06 When lighted lamps required. (1) Except as provided in subs. (2) and (4), no person may operate a vehicle upon a highway during hours of darkness unless all headlamps, tail lamps and clearance lamps with which such vehicle is required to be equipped are lighted. Parking lamps as defined in s. 347.27 shall not be used for this purpose.

(2) Headlamps need not be lighted on a towed vehicle or on a vehicle having at least 2 lighted adverse weather lamps on the front thereof and being operated under the circumstances described in s. 347.26 (3) (b).

(3) The operator of a vehicle shall keep all lamps and reflectors with which such vehicle is required to be equipped reasonably clean and in proper working condition at all times.

(4) A duly authorized warden, as defined in s. 24.01 (11), may operate a vehicle owned or leased by the department of natural resources upon a highway during hours of darkness without lighted headlamps, tail lamps or clearance lamps in the performance of the warden's duties under s. 29.05 (4).

History: 1977 c. 425; 1979 c. 32; 1981 c. 98 s. 3.

347.07 Special restrictions on lamps and the use thereof. (1) Whenever a motor vehicle equipped with headlamps also is equipped with any adverse weather lamps, spotlamps or auxiliary lamps, or with any other lamp on the front thereof projecting a beam of intensity greater than 300 candlepower, not more than a total of 4 of any such lamps or combinations thereof on the front of the vehicle shall be lighted at any one time when such vehicle is upon a highway.

(2) Except as otherwise expressly authorized or required by this chapter, no person shall operate any vehicle or equipment on a highway which has displayed thereon:

(a) Any color of light other than white or amber visible from directly in front; or

(b) Any color of light other than red on the rear; or

(c) Any flashing light.

Flashing blue lights on police vehicles are prohibited by (2) (c). 63 Atty. Gen. 80.

347.08 Determining the visibility distance and mounted height of lamps. (1) Whenever this chapter states a requirement as to distance

from which certain lamps and devices shall render objects visible or within which such lamps or devices shall be visible, such distance shall be measured during hours of darkness under normal atmospheric conditions and upon a straight, level, unlighted highway unless a different time, direction or condition is expressly stated.

(2) Whenever this chapter requires a lamp or device to be mounted at a certain height, the distance shall be measured from the center of the lamp or device to the level ground upon which the vehicle stands when such vehicle is without load.

347.09 Headlamps on motor vehicles. (1) No person shall operate a motor vehicle on a highway during hours of darkness unless such vehicle is equipped as follows:

(a) Every motor vehicle, other than a motorcycle or Type 2 automobile, shall be equipped with at least 2 headlamps, which headlamps shall comply with the requirements and limitations set forth in sub. (2) and s. 347.10 and shall be mounted symmetrically with respect to the vertical plane extending through the longitudinal axis of the vehicle with at least one on each side of the center of the front of the motor vehicle.

(b) Every moped, motorcycle or Type 2 automobile shall be equipped with at least one and not more than 2 headlamps, which headlamps shall comply with the requirements and limitations set forth in sub. (2) and s. 347.10.

(c) Every motor bicycle or vehicle registered under s. 341.067 and operated by a person licensed under s. 343.075 or 343.135 shall be equipped with at least one and not more than 2 headlamps, which headlamps shall comply with the requirements and limitations set forth in sub. (2) and s. 347.11.

(2) Every headlamp on a motor vehicle shall be located at a height of not more than 54 inches nor less than 24 inches.

History: 1983 a. 243.

347.10 Headlamp specifications for motor vehicles other than mopeds and motor bicycles. (1) Except as provided in sub. (4), the headlamps or the auxiliary driving lamp or the auxiliary passing lamp or combination thereof on motor vehicles other than mopeds and motor bicycles shall be so arranged that the driver may select at will between distributions of light projected to different elevations. Such lamps may, in addition, be so arranged that such selection can be made automatically.

(2) Multiple-beam headlamps shall comply with the following requirements:

(a) There shall be an uppermost distribution of light or composite beam so aimed and of such intensity as to reveal persons and vehicles at a distance of at least 350 feet ahead for all conditions of loading;

(b) There shall be a lowermost distribution of light or composite beam so aimed and of sufficient intensity to reveal persons and vehicles at a distance of at least 100 feet ahead, and on a straight level road under any condition of loading none of the high-intensity portion of the beam shall be so directed as to strike the eyes of an approaching driver.

(3) No person shall sell after July 1, 1958, any new motor vehicle equipped with multiple beam headlamps and no person shall operate any motor vehicle sold new after July 1, 1958, and equipped with multiple beam headlamps unless such vehicle also is equipped with a beam indicator which is lighted whenever the uppermost distribution of light from the headlamps is in use and which is not otherwise lighted. Such indicator shall be so designed and located that when lighted it will be readily visible without glare to the driver of the vehicle so equipped. This subsection does not apply to motorcycles.

(4) Any motor vehicle may be operated during hours of darkness when equipped with 2 lighted lamps upon the front thereof capable of revealing persons and objects 75 feet ahead in lieu of lamps required by subs. (1) to (3) if such vehicle at no time is operated at a speed in excess of 20 miles per hour.

History: 1983 a. 243.

347.11 Headlamp specifications for mopeds and motor bicycles. The headlamps on mopeds or motor bicycles may be of the single-beam or multiple-beam type but in either event shall comply with the following requirements and limitations:

(1) The headlamp shall be an electric headlamp and the current shall be supplied by a wet battery and electric generator, by a current-generating coil incorporated into the magneto or by a generator driven directly by the motor by means of gears, friction wheel, chain or belt.

(2) The headlamp shall display a white light of sufficient illuminating power to reveal any person, vehicle or substantial object at a distance of 200 feet ahead and shall be so adjusted or operated that the glaring light rays therefrom are not directed into the eyes of the driver of any oncoming vehicle.

(3) If the moped or motor bicycle is equipped with a multiple-beam headlamp, the upper beam shall meet the minimum requirements set forth in sub. (2) and the lowermost beam shall meet the requirements applicable to a lower-

347.11 EQUIPMENT OF VEHICLES

most distribution of light as set forth in s. 347.10 (2) (b).

(4) If the moped or motor bicycle is equipped with a single-beam lamp, such lamp shall be so aimed that when the vehicle is loaded none of the high-intensity portion of light, at a distance of 25 feet ahead, projects higher than the level of the center of the lamp from which it comes.

History: 1983 a. 243.

347.115 Modulating headlamps for motorcycles, motor bicycles or mopeds. A motorcycle, motor bicycle or moped may be equipped with and use a means of modulating the upper beam of the headlamp between a high and a lower brightness at a rate of 200 to 280 changes per minute. A headlamp may not be modulated during hours of darkness.

History: 1981 c. 52; 1983 a. 243.

347.12 Use of multiple-beam headlamps.

Whenever a motor vehicle is being operated on a highway during hours of darkness, the operator shall use a distribution of light or composite beam directed high enough and of sufficient intensity to reveal a person or vehicle at a safe distance in advance of the vehicle, subject to the following requirements and limitations:

(1) Whenever the operator of a vehicle equipped with multiple-beam headlamps approaches an oncoming vehicle within 500 feet, he shall dim, depress or tilt his headlights so that the glaring rays are not directed into the eyes of the operator of the other vehicle.

(2) Whenever the operator of a vehicle equipped with multiple-beam headlamps approaches or follows another vehicle within 500 feet to the rear, he shall dim, depress, or tilt his headlights so that the glaring rays are not reflected into the eyes of the operator of the other vehicle.

347.13 Tail lamps and registration plate lamps.

(1) No person shall operate a motor vehicle, mobile home or trailer or semitrailer upon a highway during hours of darkness unless such motor vehicle, mobile home or trailer or semitrailer is equipped with at least one tail lamp mounted on the rear which, when lighted during hours of darkness, emits a red light plainly visible from a distance of 500 feet to the rear. No vehicle originally equipped at the time of manufacture and sale with 2 tail lamps shall be operated upon a highway during hours of darkness unless both such lamps are in good working order.

(2) Every tail lamp on a vehicle shall be located at a height of not more than 72 inches nor less than 20 inches.

(3) No person shall operate on a highway during hours of darkness any motor vehicle upon the rear of which a registration plate is required to be displayed unless such motor vehicle is equipped with a lamp so constructed and placed as to illuminate with a white light the rear registration plate and render it clearly legible from a distance of 50 feet to the rear. Such lamp may be incorporated as part of a tail lamp or may be a separate lamp.

(4) Tail lamps and registration plate lamps shall be so wired as to be lighted whenever the headlamps or auxiliary driving lamps are lighted. In a tractor-semitrailer combination, 2 switches may be employed, one to activate semitrailer lamps and one to activate tractor lamps.

History: 1973 c. 252.

347.14 Stop lamps. (1) No person shall operate a motor vehicle, mobile home or trailer or semitrailer upon a highway unless such motor vehicle, mobile home or trailer or semitrailer is equipped with at least one stop lamp mounted on the rear and meeting the specifications set forth in this section. The stop lamp on a mobile home or trailer or semitrailer shall be controlled and operated from the driver's seat of the propelling vehicle. A stop lamp may be incorporated with a tail lamp. No vehicle originally equipped at the time of manufacture and sale with 2 stop lamps shall be operated upon a highway unless both such lamps are in good working order.

(2) A stop lamp shall be so constructed as to be actuated upon application of the service or foot brake or separate trailer brake and shall emit a red or amber light plainly visible and understandable from all distances up to 300 feet to the rear during normal sunlight when viewed from the driver's seat of the vehicle following.

347.145 Deceleration warning lights for motorcycles, motor bicycles or mopeds.

A motorcycle, motor bicycle or moped may be equipped with and use a system in which an amber light which pulses in a controlled fashion at a rate which varies exponentially with deceleration is center mounted on the rear of the vehicle.

History: 1981 c. 52; 1983 a. 243.

347.15 Direction signal lamps or devices.

(1) No person shall sell any new motor vehicle, other than a moped or motorcycle, unless such motor vehicle is equipped with direction signal lamps meeting the requirements of this section. No person shall operate on a highway any motor vehicle sold new after January 1, 1955, or any mobile home, or trailer or semitrailer sold

new after January 1, 1968, other than a vehicle which is operated pursuant to s. 341.47 (1) (b) or a moped or motorcycle, unless such vehicle is equipped with direction signal lamps meeting the requirements of this section. Any other vehicle may be equipped with such lamps. Subsection (3m) notwithstanding direction signals are not required on trailers when the rear direction signals on the towing vehicle are fully visible from all distances to the rear to 300 feet during normal sunlight when viewed from the driver's seat of the vehicle following.

(2) Except as provided in sub. (1), there shall be at least 2 direction signal lamps showing to the front on motor vehicles and at least 2 showing to the rear on motor vehicles, mobile homes, trailers and semitrailers, so as to indicate intention to turn right or left. Lamps showing to the front shall be located on the same level and as widely spaced laterally as practicable and lamps showing to the rear shall be located on the same level and as widely spaced laterally as practicable. Such lamps shall project a flashing white or amber light visible to the front and a flashing red or amber light visible to the rear. Direction signal lamps when in use shall be plainly visible and understandable from all distances to 300 feet during normal sunlight. When actuated, such lamps shall indicate the intended direction of turning by flashing the lights showing to the front and rear on the side toward which the turn is made.

(3) Vehicles equipped with direction signal lamps shall be equipped with a signal visible to the signaling driver when his signal lamps are operating.

(3m) Any motor vehicle or combination of vehicles in use on a highway shall be equipped with direction signals meeting the requirements of this section when the distance from the center of the top of the steering post to the left outside limit of the body, cab or load of such motor vehicle or combination of vehicles exceeds 24 inches, or when the distance from the center of the top of the steering post to the rear limit of the body or load thereof exceeds 14 feet.

(4) Vehicles sold new prior to July 1, 1958, are exempt from the requirements of this section if they either comply with the requirements of s. 85.06 (15), 1955 stats., or are exempt from the requirements of that section.

History: 1975 c. 297; 1933 a. 243.

347.16 Clearance lamps and reflectors. (1) No person shall operate on a highway during hours of darkness any vehicle, except automobiles, having a width at any part in excess of 80 inches unless such vehicle is equipped with:

(a) Two clearance lamps mounted on the front of the vehicle so as to be visible from the front; and

(b) Two clearance lamps mounted on the rear of the vehicle so as to be visible from the rear; and

(c) Two reflectors mounted on the rear of the vehicle in such a manner as to indicate as nearly as possible the extreme width of the vehicle.

(2) No person shall operate any of the following vehicles on a highway during hours of darkness unless such vehicles are equipped as indicated:

(a) Every truck tractor shall carry on the front 2 clearance lamps, one at each side.

(b) Every trailer or semitrailer shall carry on the rear 2 reflectors, one on each side.

(3) ReflectORIZED material extending across the full width of the vehicle and otherwise meeting the mounting and visibility specifications for reflectors may be used in lieu of the reflectors required by this section.

347.17 Color of clearance and marker lamps and reflectors. Whenever a vehicle is equipped with clearance lamps, sidemarker lamps or reflectors:

(1) Those clearance and marker lamps and reflectors mounted on the front or on the side near the front of the vehicle shall display or reflect an amber color;

(2) Those clearance lamps and marker lamps and reflectors mounted on the rear or on the sides near the rear of the vehicle, or on both, shall display or reflect a red color.

347.18 Mounting of clearance lamps and reflectors. (1) Whenever s. 347.16 requires any reflector to be displayed upon a vehicle, each such reflector shall be mounted at a height not less than 16 inches nor more than 60 inches above the ground on which the vehicle stands. On vehicles which are more than 80 inches wide, the front and rear reflectors shall be mounted so as to indicate as nearly as possible the extreme width of the vehicle. Any required red reflector on the rear of a vehicle may be incorporated with the tail lamp but such reflector shall meet all the other reflector requirements of this chapter.

(2) Whenever this chapter requires a vehicle to be equipped with clearance lamps, such lamps shall be mounted in such a manner as to indicate the extreme width of the vehicle and as near to the top thereof as practicable except that when rear identification lamps are mounted at the extreme height of the vehicle, rear clearance lamps may be mounted at optional heights.

History: 1975 c. 121.

347.19 EQUIPMENT OF VEHICLES

4116

347.19 Visibility of clearance lamps and reflectors. (1) Every reflector required by s. 347.16 to be displayed upon a vehicle shall be of such size and characteristics and so maintained as to be readily visible during the hours of darkness from all distances within 500 feet to 50 feet from the vehicle when directly in front of lawful upper beams of headlamps.

(2) Front and rear clearance lamps when lighted shall be capable of being seen and distinguished under normal atmospheric conditions during hours of darkness at a distance of 500 feet from the front and rear, respectively, of the vehicle.

347.20 Lamp or flag on projecting load or fixture. (1) No person shall operate on a highway during hours of darkness any vehicle with a load or fixture thereon extending more than 4 feet beyond the rear of the bed or body thereof unless there is displayed at the extreme rear end of the load or fixture a red light or lantern plainly visible from a distance of at least 500 feet to the sides and rear. The red light or lantern shall be in addition to any tail lamp or clearance lamp which the vehicle is required to carry.

(2) No person shall operate on a highway, at times other than hours of darkness, any vehicle with a load or fixture thereon extending more than 4 feet beyond the rear of the bed or body thereof unless there is displayed at the extreme rear end of such load or fixture a red flag or cloth not less than 12 inches square and so hung that the entire area is visible to the operator of a vehicle approaching from the rear.

(3) This section does not apply to vehicles loaded with loose hay or straw.

History: 1981 c. 176.

347.21 Lamps and flags on trains of agricultural vehicles. (1) No person shall operate on a highway during hours of darkness any train of vehicles authorized by s. 348.08 (1) (b) or (d) unless there is mounted on each side of every vehicle in such train, including farm tractors and implements of husbandry, at least one lamp emitting a red light visible from a distance of 500 feet to the side of the vehicle on which mounted or, in lieu thereof, at least one red reflector visible from all distances within 500 feet to 50 feet of the side of the vehicle when directly in front of lawful upper beams of headlamps.

(2) No person shall operate on a highway, at times other than hours of darkness, any train of agricultural vehicles authorized by s. 348.08 (1) (b) unless there is displayed a red flag at least 12 inches square on each rear corner of the rear-most vehicle in the train.

History: 1979 c. 143, 353; 1981 c. 276; 1981 c. 391 s. 210.

347.22 Lamps on farm tractors and self-propelled farm implements. (1) No person shall operate or park a farm tractor or self-propelled farm implement upon a highway during hours of darkness unless such tractor or implement carries the lighted headlamps and tail lamps which would be required of other motor vehicles under similar circumstances.

(2) No person shall operate or park a farm tractor or self-propelled farm implement upon a highway during hours of darkness with any lamp thereon showing any light to the rear other than red in color.

347.23 Lamps on highway maintenance equipment. (1) No person shall operate upon a highway during hours of darkness any road machinery or motor vehicle used in highway construction or maintenance unless such vehicle or road machinery is equipped either as prescribed by par. (a) or (b):

(a) A red light visible from a distance of 500 feet shall be displayed on each side of the front and on each side of the rear to give adequate warning of the presence of such vehicle or machinery and to show safe clearance for passing or overtaking vehicles; or

(b) In lieu of the red lights prescribed by par. (a), 2 amber floodlamps may be used, one to be mounted on each side of the vehicle or machinery so as to illuminate its sides and its attachments, if any, to show safe clearance for passing or overtaking vehicles. Such floodlamps shall display an amber light of sufficient illuminating power to indicate safe clearance from a distance of 200 feet to the front and rear of such vehicle or machinery.

(2) The lights specified in sub. (1) need not be displayed upon motor vehicles used in highway construction or maintenance work when such vehicles are traveling along the highway at their normal operating speed in the ordinary course of traffic.

(4) No person shall operate upon the left-hand side of a highway during hours of darkness any road machinery or motor vehicle used in highway construction or maintenance, including snow and ice control, unless such vehicle or machinery is equipped with an auxiliary lamp or lamps projecting a flashing amber light visible from all directions for a 360-degree lens (beehive type lamp) or revolving type lamp and visible front and rear for reflectorized stationary directional type lamps. For flashing type lamps the number of flashes per minute shall be between 60 and 90. For revolving type lamps the revolutions per minute shall be between 45 and 90. The lenses of such auxiliary lamps shall not be less than 6 inches in diameter for the

reflectorized stationary directional type lamp; 3-3/4 inches minimum diameter and 5-inch minimum height for the 360-degree lens (beehive type lamp); and 3-3/4 inches minimum width and 4-5/8 inches minimum height for the revolving type lamp. The lamps shall be equipped with bulbs of 50 candlepower minimum. The lamps shall be mounted approximately midway between the transverse extremities of the vehicle or machinery and at the highest practicable point.

347.24 Lamps on nonmotor vehicles and equipment. (1) (a) Except as provided in par.

(b), no person may operate on a highway during hours of darkness any implement of husbandry or any other vehicle not specifically required by law to be equipped with lamps or other lighting devices unless such implement or vehicle is equipped with at least 2 lighted lamps or lanterns exhibiting a white light visible from a distance of 500 feet ahead and 2 lighted lamps or lanterns exhibiting a red light visible from a distance of 500 feet to the rear or, as an alternative to the red lamps or lanterns, 2 red reflectors mounted as specified in s. 347.18 and meeting the visibility requirements of s. 347.19 may be displayed on the rear of such vehicle or implement of husbandry.

(b) Any implement of husbandry or any other vehicle not specifically required by law to be equipped with lamps or other lighting device and which was manufactured on or before January 1, 1984, shall comply with the lamp requirements of s. 347.24 (1), 1981 stats.

(2) No person may operate on a highway during hours of darkness a vehicle drawn by an animal unless the vehicle is equipped with at least one lighted lamp or lantern exhibiting a white light visible from a distance of 500 feet ahead and 2 lighted lamps or lanterns exhibiting red light visible from a distance of 500 feet to the rear and mounted in such a manner as to indicate the extreme width of the vehicle.

History: 1977 c. 418; 1983 a. 124.

347.245 Identification emblem on certain slow moving vehicles. (1) After January 1, 1970, no person may operate on a highway, day or night, any vehicle or equipment, animal-drawn vehicle, or any other machinery, including all road machinery, that usually travel at speeds less than 25 miles per hour or any vehicle operated under a special restricted operator's license issued under s. 343.135, unless there is displayed on the most practicable visible rear area of the vehicle or combination of vehicles, a slow moving vehicle (SMV) emblem as described in and displayed as provided in sub. (2). Any towed vehicle or machine is exempt from

this provision if the towing vehicle is visible from the rear and is in compliance with this section. All road machinery is excluded when it is engaged in actual construction or maintenance work either guarded by a flagman or clearly visible warning signs. The requirement of the emblem shall be in addition to any lighting devices required or permitted by law. Mopeds and bicycles are excluded from the provisions of this section unless they are operated under a special restricted operator's license issued under s. 343.135. The SMV emblem need not be displayed on vehicles moving directly across the highway.

(2) Standards and specifications for the design and position of mounting of the SMV emblem shall be established by rule by the secretary. The standards and specifications for SMV emblems shall correlate with and, so far as possible, conform with those approved by the American society of agricultural engineers. The secretary shall submit such standards and specifications, and any subsequent changes therein, to the assembly and senate committees having jurisdiction over transportation matters as determined by the speaker of the assembly and the president of the senate acting jointly for their approval.

(3) No person shall display such emblem on a roadway, except as provided in sub. (1), nor on roadside stationary objects such as mailboxes or signposts and no such emblem shall be used as a clearance marker for wide vehicles. No slow moving vehicle actually engaged in construction or maintenance guarded by a flagman or clearly visible warning signs need remove the slow moving vehicle emblem.

(4) No person shall display such emblem on any vehicle or equipment not specified in sub. (1).

(5) This section does not apply to any vehicle or combination of vehicles to the left rear of which is attached a yellow or amber flashing light at least 4 inches in diameter.

History: 1977 c. 29, 288; 1979 c. 34; 1981 c. 138.

347.25 Special warning lamps on emergency vehicles, school buses and funeral vehicles. (1) Except as provided in subs. (1m) (a) and (1s), an authorized emergency vehicle may be equipped with one or more flashing, oscillating or rotating red lights, except that ambulances and fire department equipment may be equipped with red or red and white lights, and shall be so equipped when the operator thereof is exercising the privileges granted by s. 346.03. The lights shall be so designed and mounted as to be plainly visible and understandable from a distance of 500 feet both during normal sunlight

347.25 EQUIPMENT OF VEHICLES

4118

and during hours of darkness. No operator of an authorized emergency vehicle may use the warning lights except when responding to an emergency call or when in pursuit of an actual or suspected violator of the law, when responding to but not upon returning from a fire alarm or when necessarily parked on a highway in a position which is likely to be hazardous to traffic using the highway.

(1m) (a) A marked police vehicle under s. 340.01 (3) (a) may be equipped with a blue light and a red light which are flashing, oscillating or rotating.

(b) If the vehicle is so equipped, the lights shall be illuminated when the operator of the police vehicle is exercising the privileges granted under s. 346.03. The blue light shall be mounted on the passenger side of the vehicle and the red light shall be mounted on the driver side of the vehicle. The lights shall be designed and mounted so as to be plainly visible and understandable from a distance of 500 feet during normal sunlight and during hours of darkness. No operator of a police vehicle may use the warning lights except when responding to an emergency call or when in pursuit of an actual or suspected violator of the law, when responding to but not upon returning from a fire alarm or when necessarily parked on a highway in a position which is likely to be hazardous to traffic using the highway.

(c) If the state or any local authority intends to equip its police vehicles as authorized under par. (a), the state or the local authority shall give notice of its intent as a class 2 notice under ch. 985 at least 90 days before so equipping the first vehicle.

(1s) A vehicle in use by a fire department as a command post at the site of an emergency call may be equipped with a blue light which is flashing, oscillating or rotating.

(2) No person may operate a school bus which is painted as provided in s. 347.44 unless it is equipped with flashing red signals. In addition to the flashing red signals, the school bus may be equipped with a 360-degree flashing white strobe light with a flashrate of 60 to 120 per minute. The secretary shall prescribe rules for the type, installation, operation and light output brilliance of the signals and lights required or permitted under this subsection. No vehicle may be equipped with such flashing red signals or flashing red signals and a strobe light unless it also is painted as provided in s. 347.44.

(3) The lead vehicle in a funeral procession may be equipped with a flashing amber light which may be used only when such vehicle is used as a lead vehicle in such procession.

(4) No vehicle may be equipped with or display any blue colored light or lamp unless the vehicle is used in police work authorized by the state or a political subdivision of the state or is used by a fire department as authorized under sub. (1s).

History: 1977 c. 29 s. 1654 (7) (c); 1977 c. 228; 1979 c. 54, 149; 1983 a. 56.

The burden is on the operator of an emergency vehicle to prove that the warning light met the requirements. A light showing only to the front would not provide the operator with emergency privileges for stopping, parking or turning as to vehicles approaching from the rear. *Pittman v. Loeffring*, 59 W (2d) 52, 207 NW (2d) 610.

347.255 Auxiliary lamps on emergency vehicles used to activate traffic control signal preemption devices.

(1) An authorized emergency vehicle described in s. 340.01 (3) (a), (c), (g) or (i) may be equipped and operated with lamps designed and used solely to activate official traffic control signal preemption devices.

(2) The lamps authorized for use under this section may be any color and may be flashing, oscillating, rotating or pulsating.

(3) No operator of an authorized emergency vehicle may use such lamps except when responding to an emergency call, when pursuing an actual or suspected violator of the law or when responding to, but not when returning from, a fire alarm.

History: 1979 c. 105

347.26 Restrictions on certain optional lighting equipment.

(1) GENERAL RESTRICTIONS. A vehicle need not be equipped with the lamps specified in this section, but if a vehicle is equipped with any such lamps, no person shall operate such vehicle on a highway during hours of darkness unless such lamps comply with the requirements of this section and no person shall use such lamps in a manner inconsistent with this section.

(2) SPOTLAMPS. (a) Any motor vehicle may be equipped with not more than 2 spotlamps which shall be mounted at a height of not less than 30 nor more than 72 inches.

(b) No spotlamp shall be used as a substitute for headlamps. No spotlamp shall be used as an auxiliary driving light on any motor vehicle except when such spotlamp is set or adjusted so that the rays of light are projected directly upon the road surface at a distance not exceeding 150 feet directly in front of the vehicle and to the right of the center of the traveled roadway. No spotlamp shall project any glaring light into the eyes of an approaching driver.

(3) ADVERSE WEATHER LAMPS. (a) Any motor vehicle may be equipped with not more than 2 adverse weather lamps which shall be mounted on the front of the vehicle below the level of the centers of the headlamps.

(b) Adverse weather lamps shall not be used in lieu of headlamps unless absolutely necessary in case of rain, snow, dust or fog and then only when a vehicle is equipped with 2 adverse weather lamps mounted on opposite sides of the front of the vehicle and when both such adverse weather lamps are lighted. Whenever any vehicle is equipped with only one adverse weather lamp, both headlamps of such vehicle shall be lighted at all times when such adverse weather lamp is lighted.

(4) BACK-UP LAMPS. (a) Any motor vehicle may be equipped with not more than 2 back-up lamps which shall be so directed as to project a white or amber light illuminating the roadway to the rear of such vehicle for a distance not to exceed 75 feet.

(b) No lighted back-up lamp shall be displayed on any vehicle upon a highway except when such vehicle is about to be or is being driven backward. Whenever a back-up lamp is lighted during hours of darkness, the tail lamp or tail lamps on the vehicle displaying such lighted back-up lamp also shall be lighted.

(5) IDENTIFICATION LAMPS ON TAXICABS AND BUSES. No person shall operate a motor vehicle regularly used for transporting passengers for hire displaying any lighting device for identification purposes other than a single illuminated sign or lighted lamp mounted above the top line of the windshield, colored white, amber or green. Such illuminated sign or lamp shall be so constructed as to emit a steady or flashing nonglaring light.

(6) WARNING LAMPS ON TOW TRUCKS AND SERVICE VEHICLES. (a) Any vehicle which by reason of its use upon a highway creates a vehicular traffic hazard requiring the exercise of unusual care in approaching, overtaking or passing shall be equipped with a flashing or rotating amber lamp of the dome type at the highest practicable point, visible from a distance of 500 feet, or 2 flashing amber lamps, one showing to the front and one showing to the rear, visible from a distance of 500 feet and mounted approximately midway between the extremities of the width of the vehicle and at the highest practicable point. Such amber lamp or lamps may be lighted only when such vehicle is moving a disabled vehicle along or upon a public highway at below the average speed of motor vehicle traffic on such street or highway.

(b) Operators of wreckers or towing vehicles shall equip each wrecker or towing vehicle with a flashing or rotating red lamp, in addition to flashing type amber lamps. Such lamp shall be placed on the dome of the vehicle at the highest practicable point visible from a distance of 500 feet. This flashing red lamp shall be used only

when such vehicle is standing on or near the traveled portion of a highway preparatory to towing or servicing the disabled vehicle.

(7) WARNING LAMPS ON CERTAIN HIGHWAY VEHICLES. Any vehicle of the department or a county or municipal highway department which by reason of its use upon a highway creates a vehicular traffic hazard requiring the exercise of unusual care in approaching, overtaking or passing may be equipped with a flashing red or amber lamp of the dome-light type or with 2 flashing red or amber lamps, one showing to the front and one showing to the rear. Such lamp or lamps shall be mounted approximately midway between the extremities of the width of the vehicle and at the highest practicable point and shall be used only for the purpose of warning operators of other vehicles of the presence of the traffic hazard.

(8) WARNING LAMPS FOR RURAL MAIL DELIVERY VEHICLES. Any vehicle used for rural mail delivery may be equipped with a flashing amber lamp mounted above the top line of the windshield and showing to the front and rear so as to warn other motorists that the operator of the vehicle is stopped or about to stop to deliver mail or is preparing to resume operation on the highway after having stopped to deliver mail. Such lamp may be used only for the purpose specified in this subsection.

(9) WARNING LAMPS ON PUBLIC UTILITY AND COOPERATIVE VEHICLES. Any vehicle of a public utility as defined in s. 196.01 (5) or of a cooperative association organized under ch. 185 for the purpose of producing or furnishing heat, light, power or water to its members, which by reason of its use upon a highway creates a vehicular traffic hazard requiring the exercise of unusual care in approaching, overtaking or passing may be equipped with a flashing amber lamp of the dome type or with 2 flashing amber lamps, one showing to the front and one showing to the rear. Such lamps shall be mounted approximately midway between the extremities of the width of the vehicle and at the highest practicable point and shall be used only for the purpose of warning operators of other vehicles of the presence of the traffic hazard. Should such vehicle be of a type so as to make impractical the mounting of such lamps midway between the extremities of the width of the vehicle then such mountings shall be made at or near the upper left front and rear corners of such vehicle.

(10) FLASHING AMBER LIGHT ON OVERSIZE VEHICLE. Any vehicle moving on the highway pursuant to an oversize permit issued under s. 348.25, 348.26 or 348.27 may be equipped with a flashing amber dome light upon the cab of such vehicle or with double faced flashing am-

347.26 EQUIPMENT OF VEHICLES

4120

ber light mounted along the sides of such vehicle mounted and used when the movement is oversize.

(11) FLASHING WARNING LAMPS. (a) Any vehicle may be equipped with lamps which may be used for the purpose of warning the operators of other vehicles of the presence of a vehicular traffic hazard requiring the exercise of unusual care in approaching, overtaking or passing, and when so equipped may display such warning in addition to any other warning signals required by this section. The lamps used to display such warning to the front shall be mounted at the same level and as widely spaced laterally as practicable, and shall display simultaneously flashing white or amber lights, or any shade of color between white and amber. The lamps used to display such warning to the rear shall be mounted at the same level and as widely spaced laterally as practicable, and shall show simultaneously flashing amber or red lights, or any shade of color between amber and red. These warning lights shall be visible from a distance of not less than 500 feet under normal atmospheric conditions at night. Directional signals meeting the requirements of this chapter shall be used or lamps meeting these requirements, mounted so as to comply with turn signal installation.

(b) Whenever any vehicle other than an automobile, which is equipped as permitted in par. (a), is stopped for more than 10 minutes on the traveled portion of any highway, or shoulder thereof, during hours of darkness, the driver of such vehicle shall display warning signals as required by s. 347.29.

History: 1977 c. 29 s. 1654 (8) (a); 1983 a. 53 s. 114.

347.27 When lighted lamps required on parked vehicles. (1) No person shall park or leave a vehicle standing, whether attended or unattended, upon a roadway or the shoulder immediately adjacent thereto during hours of darkness unless:

(a) Such vehicle is parked or standing where there is sufficient artificial light to render it visible from a distance of 500 feet or is lawfully parked within the corporate limits of a city or village and in either case is equipped with at least one red reflector mounted on the rear thereof as near as practicable to the side of the vehicle which is closest to passing traffic and otherwise meeting the mounting and visibility requirements specified in ss. 347.18 and 347.19; or

(b) Such vehicle displays one or more lighted lamps meeting the following requirements:

1. At least one lamp shall display a white or amber light visible from a distance of 500 feet to the front of the vehicle, and the same lamp or at least one other lamp shall display a red light

visible from a distance of 500 feet to the rear of the vehicle.

2. The location of such lamp or lamps shall always be such that at least one lamp or combination of lamps meeting the requirements of this section is installed as near as practicable to the side of the vehicle which is closest to passing traffic.

3. If the vehicle is equipped with 2 parking lamps and 2 tail lamps, both parking lamps and both tail lamps shall be lighted.

(2) Any lighted headlamps on a vehicle parked on a highway shall be depressed or dimmed.

(3) In this section, "vehicle" includes farm tractors and self-propelled farm implements, implements of husbandry, animal-drawn vehicles and road machinery.

347.28 Certain vehicles to carry flares or other warning devices. (1) No person shall operate a motor truck or motor bus more than 80 inches in width or a truck tractor or road tractor on any highway outside the corporate limits of a city or village during hours of darkness unless such vehicle carries in a place readily accessible to the driver the following warning devices:

(a) At least 3 pot torches or 3 red electric lanterns or 3 red emergency reflectors, each of which shall be capable of being seen and distinguished at a distance of at least 600 feet under normal atmospheric conditions during hours of darkness. If pot torches are carried in lieu of red electric lanterns, at least 3 red-burning fuseses shall be carried in addition to such pot torches; and

(b) At least 2 red-cloth flags, not less than 12 inches square, with standards to support such flags.

(2) No person shall operate upon a highway outside the corporate limits of a city or village during hours of darkness any motor vehicle used for the transportation of explosives or any cargo tank truck used for the transportation of flammable liquids or compressed gases unless there is carried in such vehicle 3 red electric lanterns or 3 red emergency reflectors meeting the requirements of sub. (1). No pot torch or fusee or signal produced by flame shall be carried in any such vehicle. Such red emergency reflectors shall comply with the specifications for such reflectors as set forth in interstate commerce commission motor carrier safety regulations.

347.29 Display of warning devices for certain vehicles when standing on highway. (1) Except as provided in s. 347.26 (11) (b), when-

ever any motor truck, motor bus, trailer or semitrailer more than 80 inches in width or truck tractor or road tractor is left standing, whether attended or unattended, during hours of darkness upon the traveled portion of any highway or the shoulder adjacent thereto outside the corporate limits of a city or village, the operator of such vehicle shall display the following warning devices upon the highway during the entire time the vehicle is so left standing and such devices shall be placed in the following order:

(a) A lighted fusee or lighted red electric lantern or a red emergency reflector shall immediately be placed at the traffic side of the vehicle in the direction of the nearest approaching traffic. If a lighted fusee was so placed, the driver shall replace such fusee with a lighted pot torch or lighted red electric lantern or a red emergency reflector after he has placed the warning devices specified in pars. (b) and (c) and before the fusee burns out.

(b) A lighted pot torch or lighted red electric lantern or a red emergency reflector shall be placed approximately 100 feet from the standing vehicle in the center of the lane occupied by such vehicle and toward traffic approaching in that lane.

(c) One lighted pot torch or lighted red electric lantern or a red emergency reflector shall be placed approximately 100 feet from the standing vehicle in the center of the lane occupied by such vehicle and in the opposite direction from the warning device placed in accordance with par. (b).

(2) Whenever any vehicle referred to in this section is left standing, whether attended or unattended, within 500 feet of a curve, hillcrest or other obstruction to view, the warning signal in that direction shall be so placed as to afford ample warning to other users of the highway, but in no case less than 100 feet nor more than 500 feet from the standing vehicle.

(3) Whenever any vehicle of a type referred to in this section is left standing, whether attended or unattended, upon any roadway of a divided highway during hours of darkness, the appropriate warning devices prescribed in subs. (1) and (4) shall be placed as follows:

(a) One shall be placed at a distance of approximately 200 feet from the vehicle in the center of the lane occupied by the standing vehicle and in the direction of traffic approaching in that lane;

(b) One shall be placed at a distance of approximately 100 feet from the vehicle in the center of the lane occupied by the vehicle and in the direction of traffic approaching in that lane;

(c) One shall be placed at the traffic side of the vehicle and approximately 10 feet from the

vehicle in the direction of the nearest approaching traffic.

(4) No operator of a motor vehicle used in the transportation of explosives, or of a cargo tank truck used for the transportation of any flammable liquid or compressed flammable gas shall use any flame-producing emergency signal for protecting any such vehicle. In lieu thereof, red electric lanterns or red emergency reflectors shall be used, the placement of which shall be in the same order and manner as prescribed in subs. (1) to (3).

(5) Whenever any vehicle of a type referred to in this section is left standing at any place mentioned in this section at times other than during hours of darkness, the operator of the vehicle shall display 2 red flags upon the roadway in the lane of traffic occupied by the standing vehicle, one at a distance of approximately 100 feet in advance of the vehicle and one at a distance of approximately 100 feet to the rear of the vehicle.

(6) The flares, fusees, red electric lanterns, red emergency reflectors and flags to be displayed as required in this section shall conform with the requirements of s. 347.28.

(7) This section does not apply to vehicles standing on a highway in compliance with traffic regulations or the directions of a traffic officer or official traffic sign or signal.

Flag warning under (5) not applicable in city. *Northland Ins. Co. v. Avis Rent-A-Car*, 62 W (2d) 643, 215 NW (2d) 439.

347.30 Penalty for violating lighting equipment requirements. (1) Any person violating s. 347.06 or 347.13 (2), (3) or (4) may be required to forfeit not less than \$10 nor more than \$20 for the first offense and not less than \$25 nor more than \$50 for the 2nd or subsequent conviction within a year.

(2) Any person violating ss. 347.03, 347.07 to 347.12, 347.13 (1) or 347.14 to 347.29 may be required to forfeit not less than \$10 nor more than \$200.

History: 1971 c. 278

OTHER EQUIPMENT

347.35 Brakes. (1) **MOTOR VEHICLES.** No person shall operate any motor vehicle, other than a moped or motorcycle, upon a highway unless such motor vehicle is equipped with brakes adequate to control the movement of and to stop and hold such vehicle and capable of meeting the performance specifications under s. 347.36. There shall be 2 separate means of applying the brakes, each of which means shall be effective to apply the brakes to at least 2 wheels.

347.35 EQUIPMENT OF VEHICLES

4122

(1a) PARKING BRAKES. Every such vehicle and combination of vehicles, except mopeds and motorcycles, shall be equipped with parking brakes adequate to hold the vehicle on any grade on which it is operated, under all conditions of loading on a surface free from snow, ice or loose material. The parking brakes shall be capable of being applied by the driver's muscular effort or by spring action or by equivalent means. Their operation may be assisted by the service brakes or other source of power provided that failure of the service brake actuation system or other power assisting mechanism will not prevent the parking brakes from being applied. The parking brakes shall be so designed that when once applied they shall remain applied with the required effectiveness despite exhaustion of any source of energy or leakage of any kind. The same brake drums, brake shoes and lining assemblies, brake shoe anchors and mechanical brake shoe actuation mechanism normally associated with the wheel brake assemblies may be used for both the service brakes and the parking brakes. If the means of applying the parking brakes and the service brakes are connected in any way, they shall be so constructed that failure of any one part shall not leave the vehicle without operative brakes.

(2) MOPEDS AND MOTORCYCLES. No person may operate a moped or motorcycle upon a highway unless the moped or motorcycle is equipped with at least one brake capable of meeting the performance specifications set forth in s. 347.36. The brake may be designed to be operated either by hand or by foot.

(3) TRAILERS, SEMITRAILERS AND TOWED VEHICLES. (a) Except as provided in par. (am), no person shall operate on a highway any trailer, semitrailer or other towed vehicle having a gross weight of 3,000 pounds or more and manufactured after January 1, 1942 unless such vehicle is equipped with brakes adequate to control the movement of and to stop and hold it.

(am) A motor vehicle may be towed without being equipped with brakes as provided in par. (a) if the gross weight of the towed vehicle is not more than 40% of the gross weight of the towing vehicle and the brakes on the towing vehicle are capable of bringing the combination of towing vehicle and towed vehicle to a stop as provided in s. 347.36 (1).

(b) Every full trailer, semitrailer, pole trailer or other towed vehicle required to be equipped with brakes shall be equipped with brake systems of such design and type, and capable of meeting such performance standards, as established by rule of the department.

(c) This subsection does not apply to farm trailers or to disabled vehicles while being towed to a place of repair or to automobiles or trucks while being towed or being transported pursuant to s. 341.47 (1) (b).

(4) MOBILE HOMES. No person shall manufacture and no person shall sell a mobile home in this state unless such mobile home is equipped with brakes adequate to control the movement of and to stop and hold it. No person shall operate on a highway any mobile home registered as a 1940 or later year model unless such mobile home is equipped with brakes adequate to control the movement of and to stop and hold it.

(5) IMPLEMENTS OF HUSBANDRY. (a) No person may operate on a highway any self-propelled implement of husbandry manufactured after February 1, 1985, unless the vehicle is equipped with brakes or other stopping device adequate to control the movement of and to stop and hold the implement of husbandry.

(b) Every self-propelled implement of husbandry required to be equipped with brakes or other stopping device shall be equipped with brakes or a stopping device that meets design, type or performance standards established by the department by rule. The rule of the department under this paragraph shall comply with the applicable standard established by the American society of agricultural engineers.

History: 1977 c. 29 s. 1654 (7) (e); 1979 c. 163; 1983 a. 124, 243, 244.

347.36 Performance ability of brakes. (1) Brakes on motor vehicles and brakes on combinations of vehicles shall be capable of bringing the vehicle or combination of vehicles to a stop, under normal conditions, within 50 feet when traveling at a speed of 20 miles per hour.

(3) All required brakes shall be maintained in good working order.

History: 1983 a. 243

347.37 Brake fluid, sale regulation. (1) After January 1, 1960, no hydraulic brake fluid for use in motor vehicles shall be sold in this state if such brake fluid is below the minimum standard of specifications established by the society of automotive engineers for heavy duty type brake fluid No. 70R1 or a later designator for an improved product.

(2) All manufacturers of brake fluids selling such fluids in Wisconsin shall state on the immediate containers in which such fluid is packaged that the fluid therein meets or exceeds the specifications under sub. (1).

347.38 Horns and warning devices. (1) No person shall operate a motor vehicle upon a

EQUIPMENT OF VEHICLES 347.415

highway unless such motor vehicle is equipped with a horn in good working order and capable of emitting sound audible under normal conditions from a distance of not less than 200 feet, but no person shall at any time use a horn otherwise than as a reasonable warning or make any unnecessary or unreasonably loud or harsh sound by means of a horn or other warning device.

(2) Except as otherwise provided in this section, no vehicle shall be equipped with nor shall any person use upon a vehicle any siren or compression or exhaust whistle.

(3) Any vehicle may be equipped with a theft alarm signal device if such device is so arranged that it cannot be used by the driver as an ordinary warning signal.

(4) An authorized emergency vehicle shall be equipped with a siren, but such siren shall not be used except when such vehicle is operated in response to an emergency call or in the immediate pursuit of an actual or suspected violator of the law, in which events the driver of such vehicle shall sound the siren when reasonably necessary to warn pedestrians and other drivers.

347.39 Mufflers. (1) No person shall operate on a highway any motor vehicle subject to registration unless such motor vehicle is equipped with an adequate muffler in constant operation and properly maintained to prevent any excessive or unusual noise or annoying smoke. This subsection also applies to motor bicycles.

(2) No muffler or exhaust system on any vehicle mentioned in sub. (1) shall be equipped with a cutout, bypass or similar device nor shall there be installed in the exhaust system of any such vehicle any device to ignite exhaust gases so as to produce flame within or without the exhaust system. No person shall modify the exhaust system of any such motor vehicle in a manner which will amplify or increase the noise emitted by the motor of such vehicle above that emitted by the muffler originally installed on the vehicle, and such original muffler shall comply with all the requirements of this section.

(3) In this section, "muffler" means a device consisting of a series of chambers of baffle plates or other mechanical design for receiving exhaust gases from an internal combustion engine and which is effective in reducing noise.

History: 1983 a. 243.

347.40 Mirrors. (1) No person shall operate any motor vehicle upon a highway unless such vehicle is equipped with a mirror so located as to reflect to the operator a view of the roadway

for a distance of 200 feet to the rear of such vehicle.

(2) No person shall operate on a highway any school bus having a passenger-carrying capacity of 10 or more persons including the operator unless such bus is equipped with at least one mirror which is 7 inches in diameter so located as to enable the operator to see a reflection of the road from the entire front bumper forward to a point where direct observation is possible.

History: 1975 c. 84.

347.41 Speed indicators. No person shall operate on a highway any motor vehicle primarily designed for use upon a highway unless such motor vehicle is equipped with a speedometer which with reasonable accuracy registers the speed of the vehicle, except that motor trucks or truck tractors may be equipped with tachometers or any other devices that indicate speed and motor vehicles transported pursuant and in compliance with s. 341.47 (1) (b) and (c) may be equipped with a governor of speed of a type which restricts speed and which is set at a level equal to or below the limits of 55 miles per hour in lieu of a speedometer.

History: 1983 a. 54.

347.415 Odometer tampering. (1) No person shall, either personally or through an agent, remove, replace, disconnect, reset, tamper with, alter, or fail to connect the odometer of any motor vehicle with the intent to change or affect the number of miles indicated thereon.

(2) No person may, with intent to defraud, operate a motor vehicle subject to registration under ch. 341 on any street or highway knowing that the odometer or alternate instrument for measuring vehicle mileage of the motor vehicle is removed, disconnected or nonfunctional.

(2m) No person may operate a motor vehicle subject to registration under ch. 341 on any street or highway knowing that the odometer or alternate instrument for measuring vehicle mileage of the motor vehicle is removed, disconnected or nonfunctional with intent to defraud another. An exemption will be provided if parts are on back order to correct a nonfunctional odometer or alternate instrument for measuring vehicle mileage.

(3) No person shall advertise for sale, sell, use, install, or have installed any device which causes an odometer to register any mileage other than the true mileage driven.

(4) No person shall conspire with any other person to violate sub. (1), (2) or (3).

(5) Nothing in this section shall prevent the service, repair or replacement of an odometer, provided the mileage indicated thereon remains the same as before the service, repair or replace-

347.415 EQUIPMENT OF VEHICLES

ment. Where the odometer is incapable of registering the same mileage as before such service, repair or replacement, the odometer shall be adjusted to read zero, and a written notice shall be attached, by the owner or an agent, to the left door frame of the vehicle, or other location as prescribed by the department, specifying the mileage prior to service, repair or replacement of the odometer and the date on which it was serviced, repaired or replaced. No person shall remove or alter such a notice so affixed.

History: 1975 c. 121, 199; 1977 c. 29 s. 1654 (7) (a).

347.42 Windshield wipers. No person may operate on a highway any motor vehicle equipped with a windshield, except a moped or motorcycle, unless the motor vehicle also is equipped with a device for cleaning rain, snow or other moisture from the windshield. The device shall be so constructed as to be controlled or operated by the operator of the vehicle and shall at all times be maintained in good working order.

History: 1979 c. 163; 1983 a. 243.

347.43 Safety glass. (1) No person shall operate upon a highway any trackless trolley bus manufactured after January 1, 1952, or any other motor vehicle manufactured after January 1, 1936, unless such trackless trolley bus or motor vehicle is equipped with safety glass wherever glass is used thereon in partitions, doors, windows or windshields.

(2) No person shall sell any new motor vehicle unless such vehicle is equipped with safety glass in accordance with the requirements of sub. (1).

(3) In this section, "safety glass" means glass so treated or combined with other materials as to reduce, in comparison with ordinary sheet glass or plate glass, the likelihood of injury to persons by objects from external sources or by such glass when it is struck, cracked or broken.

(4) If a common carrier or person operating under a permit or certificate issued by the office of the commissioner of transportation is convicted of operating a vehicle in violation of this section, the office may suspend or revoke such permit or certificate until such time as the vehicle has been equipped with safety glass as required by this section.

History: 1977 c. 29 s. 1654 (9) (f); 1981 c. 347.

347.44 Painting requirements for school buses; restrictions as to painting of other vehicles. (1) All school buses shall be painted as follows:

(a) With the exception of trim, the body, including hood, fenders, cowl and roof shall be

painted a uniform color, national school bus glossy yellow, according to national bureau of standards specifications;

(b) The body trim, if used, shall be black; and

(c) The words, "SCHOOL BUS", in black letters at least 8 inches high shall appear on both the front and rear of the upper body area or on a sign attached thereto.

(2) A motor vehicle described in s. 340.01 (56) (b) may, but need not, comply with sub. (1). If the motor vehicle complies with sub. (1), the vehicle shall comply with other regulations relating to school buses prescribed by the department by rule.

(3) No person may paint or in any way designate a motor vehicle in the manner described in sub. (1) except as expressly authorized by this section.

(4) When a motor vehicle in compliance with sub. (1), s. 347.25 (2), and the rules of the department relating to school bus equipment is no longer operated as a school bus, the registration of the motor vehicle for another purpose may not be permitted until the owner:

(a) Physically removes the signs identifying the vehicle as a school bus, the lights required by s. 347.25 (2) and such other equipment as the department may specify by rule; and

(b) Repaints the entire vehicle to a color other than national school bus glossy yellow or any color commonly referred to as yellow.

(5) A human service vehicle which is in compliance with sub. (1) prior to January 1, 1984, may continue to comply with sub. (1) and the rules of the department on school bus equipment while remaining in operation as a human service vehicle until January 1, 1987.

History: 1975 c. 121, 199, 224, 429; 1977 c. 29 s. 1654 (7) (e); 1977 c. 228; 1979 c. 221; 1983 a. 175.

347.45 Tire equipment. (1) All automobiles, motor trucks, motor buses, trackless trolley buses, truck tractors, trailers, semitrailers and mobile homes when operated upon a highway shall be completely equipped with tires inflated with compressed air and all other motor vehicles when operated on a highway shall be equipped with tires of rubber or of some material or construction of equal resiliency. No person shall operate on a highway any motor vehicle, trailer, semitrailer or mobile home having any metal tire in contact with the roadway, except that tire chains of reasonable proportions may be used when required for safety because of snow, ice or other conditions tending to cause a vehicle to skid, and except as provided in sub. (2) (c).

(2) No person shall operate on a highway any vehicle, including farm tractors, self-propelled farm implements, implements of husbandry,

animal-drawn vehicles and road machinery, if such vehicle has on the periphery of any of its tires any block, stud, flange, cleat, spike or other protuberance of any material other than rubber which projects beyond the tread of the traction surface of the tire, except that:

(a) Farm tractors, self-propelled farm implements, implements of husbandry, animal-drawn vehicles and road machinery may be operated with metal tires or tires having protuberances which will not injure the highway; and

(b) Tire chains of reasonable proportions may be used on any vehicle when required for safety because of snow, ice or other conditions tending to cause a vehicle to skid.

(c) A pneumatic tire may have embedded in it wire or wire coils for improving traction on ice and snow, but such tire shall be so constructed that the per cent of wire or wire coils in contact with the roadway does not exceed, after the first 1,000 miles of use or operation, 5% of the total tire area in contact with the roadway. During the first 1,000 miles of use or operation of any such tire the wire or wire coils in contact with the roadway shall not exceed 20% of the total tire area in contact with the roadway. Tires equipped with tungsten carbide studs shall be limited in usage and design as follows:

1. The department shall, by rule, designate the times of year during which any type of tire described in this paragraph may be used.

2. Such tires may be used only on authorized emergency vehicles, vehicles used to deliver mail and automobiles with out-of-state registrations and then only if such automobile is in the course of passing through this state for a period of not more than 30 days.

3. Such studs shall not project more than one-eighth inch beyond the tread surface of the tire.

(3) The authority in charge of maintenance of the highway in question may, in its discretion, issue a special permit authorizing operation upon such highway of a vehicle the operation of which would otherwise be prohibited under this section.

(4) No person shall knowingly operate on any highway any vehicle on which any tire has been regrooved or recut or offer such tire for sale or exchange. This subsection shall not apply to regrooved or recut commercial vehicle tires which are designed and constructed in such a manner that regrooving or recutting is an acceptable and safe practice, nor does this subsection apply to regrooving or recutting done in a tire recapping process.

History: 1973 c. 338; 1977 c. 29 s. 1654 (7) (a)

347.455 Modifications to height of vehicle.

(1) Except as further provided in this section, no

person may operate any vehicle on a highway if modifications have been made to the suspension system, axles or chassis of the vehicle which cause any portion of the vehicle to ride more than 4 inches above or below the height of the vehicle specified by the manufacturer. The height of the vehicle shall be measured from the level surface on which the vehicle stands.

(2) If the modification is for the purpose of strengthening or improving handling, modifications may be made to the suspension system, axles or chassis of a 4-wheel drive vehicle or a motor truck which has a gross weight of not more than 8,000 pounds which cause the vehicle to ride 5 or less inches above or below the height of the vehicle specified by the manufacturer. The height of the vehicle shall be measured from the level surface on which the vehicle stands.

(3) A 4-wheel drive vehicle or a motor truck which has a gross weight of not more than 8,000 pounds may be modified to use a tire and wheel size which exceeds the wheel and tire size specified by the manufacturer for the vehicle by up to 4 inches in radius.

History: 1981 c. 216.

347.46 Fenders and mudguards. (1) No person shall operate a vehicle of the tractor type on a highway unless the driving wheels of such vehicle are protected by suitable fenders.

(2) No person shall operate on a highway in intercity movement any privately owned motor truck or privately owned semitrailer drawn by a truck tractor, except those motor trucks and semitrailers equipped with dump bodies, unless such motor truck or semitrailer is equipped with rear fenders or mudguards of such material and so constructed and placed as to restrict to a minimum the splashing of water, mud or other material which may be thrown by the rear wheels. Such rear fenders or mudguards shall meet the following minimum specifications:

(a) The fenders or mudguards shall cover the tire or multiple tires they are protecting starting at the top from a line drawn vertically through the center of the axle and extending rearward and downward so that the fender or mudguard under any condition of operation or loading of the vehicle has a ground clearance of not more than one third of the horizontal distance from the center of the rearmost axle to the fender or mudguard;

(b) The fenders or mudguards shall be at least as wide as the tire or multiple tires they are protecting;

(c) If the vehicle is so designed and constructed that the rear wheels are covered in the manner specified in pars. (a) and (b) by means of fenders, body construction or other means of enclosure, then no special mudguards are re-

347.46 EQUIPMENT OF VEHICLES

quired. Otherwise, the vehicle shall be equipped with special mudguards to the extent necessary to meet the requirements of pars. (a) and (b).

347.47 Drawbars, trailer hitches and mobile home couplings. (1) No person shall operate a vehicle towing or drawing another vehicle or vehicles on a highway if the drawbar or other connection between any 2 vehicles exceeds 12 feet in length.

(2) No person shall operate a motor vehicle drawing a trailer, semitrailer or mobile home upon a highway unless the hitch and coupling attaching the trailer, semitrailer or mobile home to the vehicle by which it is drawn is of such construction as to cause such trailer, semitrailer or mobile home to follow in direct line with the propelling vehicle without dangerous side swing or wobble. The hitch and coupling, the surface to which they are attached, and the connections, shall be of sufficient strength to prevent failure under all conditions of operation. The hitch is that part of the connecting mechanism, including the coupling platform and its attaching members or weldments, which is attached to the towing vehicle. The coupling is that part of the connecting mechanism, including the coupling and its attaching members or weldments, which is attached to the trailer or mobile home and by which connection is made to the hitch. If a device is used between the trailer proper and the coupling such as a pole, such device shall also meet the requirements of this section.

(3) In addition to the hitch and coupling specified in sub. (2), every towed vehicle shall be coupled to the towing vehicle by means of safety chains, leveling bars or cables. This requirement does not apply to a semitrailer having a connecting device composed of a 5th wheel and kingpin assembly, nor to a pole or pipe dolly. The safety chains, leveling bars or cables shall have only the necessary slack to permit proper turning and safety chains or cables shall be so connected to the towed and towing vehicle to prevent the drawbar from dropping to the ground if the hitch or coupling disengages. Two separate lengths of safety chain, leveling bars or cable shall be required on all trailers and mobile homes; however, the department may authorize use of such other appropriate equipment or methods approved by nationally recognized organizations which recommend safety standards for motor vehicles.

(4) Trailer, semitrailer and mobile home couplings and the safety chains, leveling bars or cables shall be of such minimum strength, design and type as established by published rule of the department.

History: 1971 c. 88; 1977 c. 29 ss. 1654 (7) (e); 1979 c. 34.

347.48 Safety belts and child safety restraint systems. (1) **SAFETY BELTS REQUIRED.** It is unlawful for any person to buy, sell, lease, trade or transfer from or to Wisconsin residents at retail an automobile, which is manufactured or assembled commencing with the 1962 models, unless such vehicle is equipped with safety belts installed for use in the left front and right front seats thereof, and no such vehicle shall be operated in this state unless such belts remain installed.

(2) **TYPE AND MANNER OF INSTALLING.** All such safety belts must be of a type and must be installed in a manner approved by the department. The department shall establish specifications and requirements for approved types of safety belts and attachments thereto. The department will accept, as approved, all seat belt installations and the belt and anchor meeting the society of automotive engineers' specifications.

(3) **MANDATORY USE BY RULE; PROHIBITED.** Except as provided under sub. (4) (a) 2, the department may not, by rule, require directly or indirectly the wearing of safety belts or shoulder harnesses.

(4) **CHILD SAFETY RESTRAINT SYSTEMS REQUIRED; STANDARDS; EXEMPTIONS.** (a) 1. No resident, who is the parent or legal guardian of a child under the age of 2, may transport the child in a motor vehicle unless the child is properly restrained in a child safety restraint system approved by the department or, when present in the vehicle, permit the child to be transported in a motor vehicle unless he or she has provided for the proper restraint of the child. If a resident who is not the parent or legal guardian of the child transports the child in a motor vehicle when the parent or legal guardian of the child is not present, the resident shall properly restrain the child. "Properly restrained" means fastened in a manner prescribed by the manufacturer of the system which permits the system to act as a body restraint but does not include a system in which the only body restraint is a safety belt of the type required under sub. (1). The department shall, by rule, establish standards in compliance with applicable federal standards for approved types of child safety restraint systems for those child restraint systems purchased after November 1, 1982. No resident is required to have more than 3 child safety restraint systems in a vehicle.

2. No resident, who is the parent or legal guardian of a child who is at least 2 years old but less than 4 years old, may transport the child in a motor vehicle unless the child is properly restrained in a child safety restraint system approved by the department under

subd. 1 or in a safety belt approved by the department under sub. (2) or, when present in the vehicle, permit the child to be transported in a motor vehicle unless he or she has provided for the proper restraint of the child. If a resident who is not the parent or legal guardian of the child transports the child in a motor vehicle when the parent or legal guardian of the child is not present, the resident shall properly restrain the child. "Properly restrained" means fastened in a manner prescribed by the manufacturer of the system which permits the system to act as a body restraint.

3. Notwithstanding subds. 1 and 2, a person other than the operator of a motor vehicle transporting a child required to be properly restrained under subd. 1 or 2 may temporarily remove a child from a safety restraint system to attend to the personal needs of the child under all of the following conditions:

a. When the child safety restraint system is attached to a back passenger seat.

b. When the person attending to the child's personal needs is seated in a back passenger seat.

c. When the person physically restrains the child while attending to the child's personal needs.

(b) The department may, by rule, exempt from the requirements under par. (a) any child who because of a physical or medical condition or body size cannot be placed in a child safety restraint system or safety belt.

(c) 1. This subsection does not apply if the motor vehicle is a motor bus, school bus, taxicab, moped, motorcycle or is not required to be equipped with safety belts under sub. (1) or 49 CFR 571.

2. This subsection does not apply to a vehicle with a seating capacity, as designated by the manufacturer, of 2 persons if there are 2 persons 4 years of age or older in the vehicle.

(d) Evidence of compliance or failure to comply with par. (a) is admissible in any civil action for personal injuries or property damage resulting from the use or operation of a motor vehicle but failure to comply with par. (a) does not by itself constitute negligence.

History: 1975 c. 337; 1977 c. 29 s. 1654 (7) (a); 1981 c. 327; 1983 a. 285.

See note to 895.045, citing *Foley v. City of West Allis*, 113 W (2d) 475, 335 NW (2d) 824 (1983).

A statute requiring the wearing of seat belts in motor vehicles would be constitutional. 58 Atty. Gen. 241.

The seat belt defense—state of the law. Kircher, 53 MLR 172.

The seat belt defense—the trial lawyer's view. Bowman, 53 MLR 191.

Practical defense problems—the expert's view. Huelke, 53 MLR 203.

The seat belt as a cause of injury. Snyder, 53 MLR 211.

347.485 Protective headgear for motorcyclists. (1) (a) No person who holds an instructional permit under s. 343.07 (4) or who is under 18 years of age may operate or ride upon a motorcycle on any highway unless the person is wearing protective headgear of a type which meets the standards established for motorcycle operation in 49 CFR 571.218 and the chin strap is properly fastened.

(am) No person may operate a motorcycle when carrying a passenger under 18 years of age unless the passenger is wearing protective headgear.

(b) No person may sell or offer for sale any protective headgear for use by a driver or passenger on a motorcycle, not meeting the standards established for motorcycle operation in 49 CFR 571.218.

(2) No person shall operate a motorcycle on any highway unless such person is wearing eye protection as follows: (a) protective face shield attached to the headgear, or (b) glasses or (c) goggles. If the vehicle is equipped with a windshield which rises a minimum of 15 inches above the handlebar, the use of other eye protective devices is not mandatory. This subsection shall not apply to persons operating a motorcycle in a parade sanctioned by the local municipality.

(3) No person may rent, lease or loan a motorcycle to another unless he or she has ascertained that such party has the required eye protection and, if the party holds an instructional permit under s. 343.07 (4) or is under 18 years of age, that the party has the required protective headgear for operating the motorcycle.

(4) Every person in the motorcycle rental business shall have clean, usable protective headgear for rent in sufficient quantity to care for the needs of all customers.

History: 1977 c. 29 s. 1654 (7) (c); 1977 c. 204, 447; 1983 a. 133, 243, 538.

The operators of three-wheeled trucks, automobiles, golf carts, and other special purpose vehicles such as street sweepers, industrial fork-lift trucks, and motorized wheelbarrows are not required to have special drivers' licenses or wear crash helmets and goggles. 58 Atty. Gen. 17.

347.486 General requirements. (1) No person may operate a motorcycle if the handgrips of the handlebars rise more than 30 inches above the lowest point of the top of the driver's seat when the seat is occupied.

(2) No person may operate a motorcycle with an improvised, defective or repaired handlebar.

(3) No person may operate a motorcycle without a functioning muffler.

History: 1979 c. 163; 1983 a. 243.

347.487 EQUIPMENT OF VEHICLES

4128

347.487 Seating requirements. Except as provided in s. 346.595 (3m), no more than 2 persons shall ride on a motorcycle during operation, and then only if the vehicle is equipped and designed with adequate seats and foot rests or pegs. Foot rests or pegs shall be mounted in accordance with manufacturer's specifications. In the absence of manufacturer's specifications, foot rests or pegs for the passenger shall be located on the same horizontal plane as those of the operator.

History: 1983 a. 243.

347.488 Moped equipment. No person may operate a moped unless:

(1) The moped complies with all federal emission, equipment and safety standards applicable at the time of manufacture;

(2) None of the original equipment installed on the moped by the manufacturer has been replaced with equipment of lesser performance characteristics; and

(3) The performance characteristics of the moped have not been altered so as to enable it to exceed the maximum design speed authorized for a moped under s. 340.01 (29m).

History: 1977 c. 288.

347.489 Lamps and other equipment on bicycles and motor bicycles. (1) No person may operate a bicycle or motor bicycle upon a highway, bicycle lane or bicycle way during hours of darkness unless the bicycle or motor bicycle is equipped with or the operator is wearing a lamp emitting a white light visible from a distance of at least 500 feet to the front of the bicycle or motor bicycle. A bicycle or motor bicycle shall also be equipped with a red reflector that has a diameter of at least 2 inches of surface area on the rear so mounted and maintained as to be visible from all distances from 50 to 500 feet to the rear when directly in front of lawful upper beams of headlamps on a motor vehicle. A lamp emitting a red light visible from a distance of 500 feet to the rear may be used in addition to but not in lieu of the red reflector.

(2) No person may operate a bicycle or motor bicycle upon a highway, bicycle lane or bicycle way unless it is equipped with a brake in good working condition, adequate to control the movement of and to stop the bicycle or motor bicycle whenever necessary.

(3) No bicycle or motor bicycle may be equipped with nor may any person riding upon a bicycle or motor bicycle use any siren or compression whistle.

History: 1973 c. 182, 333; 1977 c. 208; 1983 a. 243 s. 39.

347.49 Equipment of vehicles transporting flammable liquids. (1) In this section, "flammable liquid" means any gasoline, naphtha, benzene, fuel oil, crude oil, kerosene or other liquid which has a flashpoint of 80° F. or less as determined by a Tagliabue or equivalent closed-cup test device.

(2) No person shall transport in or on any motor vehicle, trailer or semitrailer upon a highway any flammable liquid except by tank mounted on or attached to or structurally a part of such motor vehicle, trailer or semitrailer and which is plainly marked to show that flammable liquids are being transported therein.

(3) This section does not apply to transportation of flammable liquids as freight only by the consumer from the place of purchase to the place of consumption if such liquids are transported in drums or other containers having a capacity of not more than 100 gallons each and if the total amount of such liquids so transported in any one vehicle or combination of vehicles does not exceed 500 gallons.

347.50 Penalties. (1) Any person violating ss. 347.35 to 347.49, except s. 347.415 (1), (2) and (3) to (5) or s. 347.48 (4) (a) or s. 347.489, may be required to forfeit not less than \$10 nor more than \$200.

(2) Any person violating s. 347.415 (1), (2) and (3) to (5) may be required to forfeit not less than \$100 nor more than \$500.

(3) (a) Any person violating s. 347.48 (4) (a) 1 may be required to forfeit not less than \$30 nor more than \$75.

(b) No forfeiture may be assessed under par. (a) if:

1. The motor vehicle was not equipped with a child safety restraint system meeting the requirements under s. 347.48 (4) (a) 1 at the time the uniform traffic citation was issued; and

2. The person provides proof that, within 30 days after the uniform traffic citation was issued, a child safety restraint system meeting the requirements under s. 347.48 (4) (a) 1 was purchased or leased and properly installed in the motor vehicle.

(4) Any person violating s. 347.48 (4) (a) 2 may be required to forfeit not less than \$10 nor more than \$25 for the first offense. For a 2nd or subsequent conviction within 3 years, a person may be required to forfeit not less than \$25 nor more than \$200.

(5) Any person violating s. 347.489 may be required to forfeit not more than \$20.

History: 1971 c. 278; 1975 c. 121; 1981 c. 327; 1983 a. 243.