## Maryland:

## **Trailer Summary:**

Dimensions: A truck or truck tractor and semitrailer combination designed for and engaged in the transportation of automobiles or boats may not exceed 65 feet in length Dimensions shall not exceed: a total width of 102 inches; and a total height: 13 feet 6 inches.

Brakes: All trailers must be equipped with parking and service brakes adequate to hold the vehicle on any grade on which it is operated. Every trailer with a registered gross weight in excess of 10,000 pounds shall be equipped with brakes acting on all wheels and of a character to be applied automatically and promptly, and remain applied for at least 15 minutes on breakaway from the towing vehicle.

Lighting/Reflectors: Every trailer shall be equipped with at least 2 rear tail lamps that emit a red light plainly visible from at least 1,000 feet to the rear. Every trailer, semitrailer, and pole trailer shall be equipped with at least two stop lamps. Every motor vehicle, trailer, semitrailer, and pole trailer, and any special mobile equipment being towed, shall carry on the rear, either as part of the tail lamps or separately, two or more red reflectors meeting the requirements of this section

Hitch/Signals: One or more safety chains are attached to the towed vehicle and the frame of the towing vehicle and have no more slack than is necessary for proper turning. While one vehicle is towing another and the connection is a chain, rope, or cable, a white, red, or orange-fluorescent warning flag or cloth at least 18 inches square shall be displayed on the connection.

Mirrors: Where the view through the inside mirror is obstructed, 2 outside rearview mirrors are required.

Speed Limits: As posted.

Towing: When towing another vehicle, the driver shall ensure that: The towed vehicle is securely attached to the towing vehicle by a primary connecting system; The connection used is Structurally adequate for the weight drawn; and mounted properly and securely, without excessive slack, but with enough slack to allow for articulation of the connection

Other: N/A

# Code TRANSPORTATION TITLE 21 - VEHICLE LAWS - RULES OF THE ROAD

#### § 24-102. Maximum width of vehicles driven on highways

Width measurement

(a)(1) Except as provided in paragraph (2) of this subsection, for purposes of this section, the width of a vehicle includes any load that it carries and shall be exclusive of safety and energy conservation devices, such as side mirrors, turn signal lamps, marker lamps, steps and handholds for entry and egress, flexible fender extensions, mudflaps and spray suppressant devices, and

load-induced tire bulges; providing the equipment or device, other than mirrors, does not extend more than 3 inches on each side of the vehicle beyond the statutory width limitation.

(2) For purposes of this section, the width of a motor home or travel trailer shall be exclusive of retractable awnings installed by the vehicle manufacturer or dealer, provided that the awnings do not extend more than 6 inches from each side of the vehicle.

Farm equipment, vehicles transporting farm equipment, or vehicles carrying load of forage crops

- (b) This section does not apply to any:
  - (1) Farm equipment;
  - (2) Vehicle transporting farm equipment; or
  - (3) Vehicle carrying a load of forage crops in connection with harvesting operations, if the distance traveled with the load on the highways in this State is less than 5 miles.

## Maximum width of vehicles driven on highways

- (c)(1) Except as provided in paragraph (2) of this subsection, a vehicle may not be driven on any highway if the width of the vehicle exceeds 102 inches unless:
  - (i) It has a permit issued by the State Highway Administration under § 24-112 of this subtitle: or
  - (ii) As to a highway under the jurisdiction of a local authority, it has special permission from the local authority.
- (2) (i) Notwithstanding paragraph (1) of this subsection, the State Highway Administration or a local authority may prohibit the use of a highway or part of a highway under its jurisdiction by a vehicle exceeding a certain width if it finds that a vehicle exceeding a certain width likely would:
  - 1. Endanger road users;
  - 2. Cause excessive deterioration to the highway; or
  - 3. Harm property adjacent to the highway.
  - (ii) If the State Highway Administration or a local authority imposes a vehicle width restriction under subparagraph (i) of this paragraph, it shall place and maintain a sign providing notice of the restriction before the affected location

#### § 24-104. Limit to height of vehicle

Maximum height of vehicle

(a) Except as provided in subsection (c) of this section, the height of any vehicle and its load may not exceed 13 feet 6 inches.

Liability for damages from collision of vehicle with bridge

(b) Except as provided in subsection (c) of this section, any person responsible for the operation of a vehicle that collides with any bridge having a clearance of less than 13 feet 6 inches shall save the owner of the bridge harmless from any liability for damages proximately caused by the low clearance.

Vehicle combinations transporting farm equipment

- (c)(1) While a vehicle combination is transporting farm equipment, the overall height of the vehicle combination and its load may extend up to 16 feet if:
  - (i) The vehicle combination is traveling on a highway for a distance not exceeding 75 miles; and
  - (ii) The load cannot readily be reduced in height.
- (2) Any person responsible for the operation of a vehicle combination described in paragraph (1) of this subsection that collides with any bridge, overhead wire, traffic control device, or light, having a clearance of less than 16 feet, shall save the owner of the bridge, wire, traffic control device, or light harmless from any liability for damages proximately caused by the low clearance.

## § 24-104.1. Length restrictions for vehicles and vehicle combinations

#### **Definitions**

- (a)(1) In this section the following words have the meanings indicated.
- (2) "Automobiles" means all assembled motor vehicles:
  - (i) Capable of being operated on a highway; and
  - (ii) Authorized under this article to be operated on a highway.
- (3) "Backhaul" means the return trip of a vehicle transporting cargo or general freight, especially when carrying goods back over all or part of the same route.
- (4) "Maxi-cube vehicle" means a nonarticulating straight truck:
  - (i) In combination with a semitrailer which does not exceed 34 feet, and is designed to be loaded and unloaded through the semitrailer; or
  - (ii) In combination with a trailer that does not exceed 28 feet.
- (5) "Saddle-mount and full-mount combinations" means a truck tractor or unloaded truck towing one or more other truck tractors or unloaded trucks in combination.
- (6) "Stinger-steered automobile transporter" means a truck tractor and semitrailer combination:
  - (i) Designed for the transportation of automobiles or boats; and
  - (ii) In which the fifth wheel is located on a drop frame behind and below the rear axle of the power unit.

#### Determination of vehicle length

- (b)(1) For purposes of this subtitle, the length of a vehicle or combination of vehicles:
  - (i) Includes its front and rear bumpers and any part of its load that extends beyond the vehicle or combination of vehicles; and
  - (ii) Does not include:
    - 1. Nonload-bearing safety and energy conservation devices, such as marker lamps, steps and handholds for entry and egress, front-mounted refrigeration units, and front-mounted air compressors; or
    - 2. Nonproperty carrying devices or their components that do not extend more than 24 inches beyond the rear of the vehicle and are needed for loading or unloading cargo.

(2) The measurement of a combination of vehicles engaged in the transportation of automobiles or boats shall not include the overhang of the transported vehicles or boats or any retractable device on the rear of the combination when in use to support a transported vehicle.

## Application of section

- (c)(1) This section does not apply to any vehicle or combination of vehicles carrying:
  - (i) Piling, poles, or mill logs that do not exceed 75 feet in length; or
  - (ii) Crew or racing shells.
- (2) This section does not prohibit:
  - (i) The use of a combination of vehicles to carry an indivisible load if the load is not over 70 feet long; or
  - (ii) A backhaul by an automobile transporter.

    Buses, single unit trucks, Class M motor homes, or publicly owned rigid buses
- (d) Except as otherwise provided in this section:
  - (1) A bus, single unit truck, or Class M motor home may not be over 40 feet long; and
  - (2) A publicly owned rigid bus may not be over 41 feet long.

#### Buses or Class M motor homes

- (e)(1) This subsection does not apply to a publicly owned rigid bus.
- (2) A bus or a Class M motor home may be over 40 feet long but may not be over 45 feet long:
  - (i) When operated on an interstate highway or any part of the State highway system designated by the Secretary in conjunction with the United States Department of Transportation; or
  - (ii) When operated on a highway that is not specified in item (i) of this paragraph if the bus or motor home is using the highway to travel the shortest practical route between a highway specified in item (i) of this paragraph and:
- 1. The point of origin or destination of the bus or motor home on a particular day;
- 2. A bus terminal; or
- 3. For a distance not to exceed 1 mile, facilities for food, fuel, repairs, or rest.

Publicly owned articulated three-axle bus

(f) Except as otherwise provided in this section, a publicly owned articulated three-axle bus may not be over 60 feet long.

Other vehicles

- (g) Any other vehicle may not exceed a length of 35 feet.

  Semitrailer and trailer (double) being operated in combination with a truck tractor
- (h) When a semitrailer and a trailer (double) are being operated in combination with a truck tractor, the combination of vehicles shall not be subject to an overall length limitation. This combination may only be operated on any part of the interstate system or other State system highways that are designated by the Secretary in conjunction with the U.S. Department of Transportation, or on a highway that is the shortest practical route between a designated highway and a truck terminal, or point of origin/destination for cargo, or for a distance not to exceed 1

mile, facilities for food, fuel, repairs, or rest. A semitrailer or trailer being operated in this combination may not exceed 28 feet in length for each unit.

Semitrailer (single) operated in combination with truck tractor

(i) When a semitrailer (single) is being operated in combination with a truck tractor, the combination of vehicles shall not be subject to an overall length limit, however, the semitrailer may not exceed 48 feet in length.

#### Combinations of vehicles

- (j) Except as otherwise provided in this section, and subject to § 24-105 of this subtitle:
- (1) In a combination of vehicles with a power unit that is a cargo-carrying vehicle, the overall length of the combination may not exceed 62 feet;
- (2) Any other combination of vehicles may not exceed 55 feet; and
- (3)(i) 1. A truck or truck tractor and semitrailer combination designed for and engaged in the transportation of automobiles or boats may not exceed 65 feet in length;
  - 2. A stinger-steered automobile transporter may not exceed 80 feet in length;
  - 3. A. A maxi-cube vehicle described in subsection (a)(4)(i) of this section may not exceed 65 feet in length; and
- B. A maxi-cube vehicle described in subsection (a)(4)(ii) of this section may not exceed 60 feet in length; and
- 4. Saddle-mount and full-mount combinations may not exceed 97 feet in length;
  - (ii) No other length requirements may be applied to the combinations of vehicles described in item (i) of this item; and
- (iii) The combinations of vehicles described in item (i) of this item may only be operated on any part of the interstate system or other State system highways that are designated by the Secretary in conjunction with the U.S. Department of Transportation, or on a highway that is the shortest practical route between a designated highway and:
- 1. A truck terminal;
- 2. A point of origin/destination for cargo; or
- 3. For a distance not to exceed 1 mile, facilities for food, fuel, repairs, or rest.

Combination of vehicles used to transport explosives and munitions

(j-1) Notwithstanding the provisions of subsection (j) of this section, when a semitrailer is being operated in combination with a power unit that is equipped with a dromedary box being used to transport explosives and munitions classified under 49 C.F.R. Part 173.50 that are intended for use by the United States Department of Defense, the combination of vehicles is not subject to an overall length limit, but the semitrailer may not exceed 48 feet in length.

Combination of vehicles lawfully operated on highways prior to December 1, 1982

- (k)(1) Notwithstanding the provisions of subsection (h) of this section, nothing shall prevent the operation of a combination of vehicles in which the semitrailer (single) does not exceed 48 1/2 feet in length or a combination of vehicles in which the semitrailer or trailer (double) does not exceed 28 1/2 feet in length for each unit; provided, the combination has been lawfully operated on the highways of this State prior to December 1, 1982.
- (2) Notwithstanding the provisions of subsection (j)(1) of this section, nothing shall prevent a power unit, which was equipped with a dromedary box, deck, or plate and was legally operated

in Maryland prior to December 1, 1982, in combination with a semitrailer or trailer from exceeding the overall length limit of 55 feet.

Truck tractor prohibited from operation in combination with more than 2 vehicles

- (1)(1) In this subsection, "vehicle" means:
- (i) A semitrailer as defined in § 11-158 of this article; or
- (ii) A trailer as defined in § 11-169 of this article.
- (2) Notwithstanding the overall length of the combination, a truck tractor may not be operated on a highway in the State in combination with more than 2 vehicles.

Combination of noncommercial vehicles consisting of power unit and travel trailer

- (m)(1) Subject to paragraph (2) of this subsection, a combination of noncommercial vehicles consisting of a power unit and a travel trailer may not exceed 65 feet in length.
- (2) The combination of vehicles exceeding 55 feet but authorized under this subsection may only be operated on:
- (i) Any part of the interstate system or other State system highways that are designated by the Secretary in conjunction with the U.S. Department of Transportation; or
- (ii) A highway that is the shortest practical route between a designated highway and:
- 1. A point of origin or destination on a particular day; or
- 2. For a distance not to exceed 1 mile, facilities for food, fuel, repairs, or rest.

## § 24-104.2. Length restrictions for operation of semitrailer (single) with truck tractors

Operation of semitrailer (single) with truck tractors

(a) Notwithstanding any other provision of this title and subject to § 24-104.1 of this subtitle and subsections (b), (c), and (d) of this section, a person may operate a semitrailer (single) in combination with a truck tractor that exceeds 48 feet in length up to a length not to exceed 53 feet.

Highway restrictions for vehicle combinations operating under this section

- (b)(1) A vehicle combination described under subsection (a) of this section may be operated only on:
  - (i) Those parts of the national interstate highway system and those State highways that are designated by the Secretary, after consultation with either the county executive, the county commissioners, the County Council of Talbot County or Wicomico County, or the Mayor of Baltimore City, or their designees, as appropriate;
  - (ii) Except in Baltimore City, a highway, authorized by the Secretary, that is the shortest practical access route between a highway designated under item (i) of this paragraph and:
    - 1. A truck terminal;
    - 2. A port;
    - 3. A point of origin or destination; or
    - 4. For a distance not to exceed one-half mile, facilities for food, fuel, repairs, or rest; or

- (iii) In Baltimore City, a street authorized by the Mayor or the Mayor's designee in conjunction with the Secretary that is the safest practical route between a highway designated under item (i) of this paragraph and:
  - 1. A truck terminal;
  - 2. A port facility;
  - 3. A point of origin; or
  - 4. A point of destination.
- (2) The Secretary shall adopt regulations establishing designated highways, a method for approving access routes, and other criteria necessary to implement this subsection.

Conditions required for vehicle combinations operating under this section

- (c) A vehicle combination operating under this section may operate in this State only under the following conditions:
- (1) The wheelbase of the semitrailer, measured as the distance from the kingpin to the center of the rear tandem axles, may not exceed 41 feet in length.
- (2) The kingpin setback, measured as the distance from the kingpin to the front of the semitrailer, may not exceed 4 feet in length.
- (3) The rear overhang, measured as the distance from the center of the rear tandem axles to the rear of the semitrailer, may not exceed 35 percent of the wheelbase of the semitrailer.
- (4)(i) The width of the semitrailer shall be at least 96 inches and not more than 102 inches.
- (ii) The distance between the outside edges of the semitrailer's tires shall be equal to the width of the semitrailer.
- (5) The semitrailer shall be equipped with:
- (i) Vehicle lights which comply with or exceed federal standards; and
- (ii) After December 31, 1993, or a date established by the Secretary that is at least 6 months after the effective date of the applicable federal standards, whichever is later, reflective material that is consistent with the standards for conspicuity promulgated by the National Highway Traffic Safety Administration.
- (6) The semitrailer shall be equipped with a rear underride guard of sufficient strength to prevent a motor vehicle from penetrating underneath the semitrailer. The rear underride guard shall extend across the rear of the semitrailer to within 4 inches of the lateral extremities of the semitrailer, and placed at a height not exceeding 22 inches from the surface as measured when the semitrailer is on a level surface.
- (7) Conspicuous warnings shall be displayed on the semitrailer, in a manner prescribed by the Administration, indicating that the vehicle combination has a wide turning radius.

Special permits to allow semitrailer (single) when operating with truck tractor

(d) Notwithstanding any other provision of this title, if the Secretary determines that the provisions of subsection (b) or (c) of this section are violated by a substantial number of persons or if specific provisions of subsection (b) or (c) of this section are held invalid by a binding determination of the Federal Highway Administration or a court of competent jurisdiction:

- (1) The Department, after a public hearing, may issue a special permit to allow a semitrailer (single), when operating in combination with a truck tractor, to exceed 48 feet in length up to a length not to exceed 53 feet;
- (2) A person may not drive or permit to be driven on any publicly maintained highway a semitrailer (single), when operating in combination with a truck tractor, that exceeds 48 feet in length up to a length not to exceed 53 feet, unless a valid special permit issued under paragraph (1) of this subsection or a facsimile of a valid special permit is carried in or on the vehicle combination; and
- (3) The Secretary may adopt regulations:
- (i) That are consistent with the standards established in this section, for the issuance of permits for vehicle combinations described under subsection (a) of this section; and
- (ii) That exempt from the requirements of, or provide alternative requirements to, subsection (c) of this section for a vehicle manufactured before July 1, 1991, if the vehicle cannot meet the requirements.

#### Issuance of special permit

- (e) A special permit issued under subsection (d)(1) of this section:
- (1) May be issued without a fee;
- (2) May be a renewable blanket permit; and
- (3) Shall expire on a date determined by the Secretary.

## § 22-301. Brake equipment required

- (a) "Driveaway or towaway operation" defined. -- "Driveaway or towaway operation" means any operation in which any motor vehicle, trailer, or semitrailer, singly or in combination, new or used, is the commodity being transported, when one set or more of wheels of the vehicle are on the roadway during the transportation, whether or not the vehicle furnishes the motive power.
- (b) In general. -- Every motor vehicle, trailer, semitrailer, and pole trailer, and any combination of these vehicles, while operating on a highway in this State, shall be equipped with brakes in compliance with the requirements of this title. All the vehicles and combinations of vehicles shall be equipped with service brakes complying with the performance requirements of § 22-302 of this subtitle and, except as provided in subsection (l) of this section, adequate to control the movement of and to stop and hold the vehicle under all conditions of loading, and on any grade incident to its operation.
- (c) Parking brakes; adequate. --
- (1) All the vehicles and combinations of vehicles, except 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.
- (2) The parking brakes shall be capable of being applied in conformance with the foregoing requirements 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 in conformance with the foregoing requirements.

- (3) 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.
- (4) 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 does not leave the vehicle without operative brakes.
- (d) Brakes on all wheels. -- Every vehicle shall be equipped with brakes acting on all wheels, except:
- (1) Trailers, semitrailers, or pole trailers of a registered gross weight not exceeding 3,000 pounds, provided that:
- (i) The total weight on and including the wheels of the trailer or trailers does not exceed 40 percent of the gross weight of the towing vehicle when connected to the trailer or trailers; and
- (ii) The combination of vehicles, consisting of the towing vehicle and its total towed load, is capable of complying with the performance requirements of § 22-302 of this subtitle;
- (2) Trailers, semitrailers, or pole trailers of a registered gross weight exceeding 3,000 pounds and not exceeding 10,000 pounds that:
  - (i) Have 2 or more axles;
  - (ii) Are equipped with brakes acting on all wheels of at least 1 axle; and
- (iii) As part of a combination of vehicles, consisting of the towing vehicle and the total load, is capable of complying with the performance requirements of § 22-302 of this subtitle;
- (3) Any vehicle being towed in driveaway or towaway operations, provided that the combination of vehicles is capable of complying with the performance requirements of § 22-302 of this subtitle;
- (4) Trucks, truck tractors, and special mobile equipment manufactured before July 24, 1980 with three or more axles need not have brakes on the front wheels. However, the trucks and truck tractors must be capable of complying with the performance requirements of § 22-302 of this

#### subtitle;

- (5) The wheel of a sidecar attached to a motorcycle or to a motor-driven cycle, or the front wheel of a motor-driven cycle need not be equipped with brakes, provided that the motorcycle or motor-driven cycle is capable of complying with the performance requirements of § 22-302 of this subtitle; and
- (6) Any vehicle equipped with at least 2 steerable axles need not have brakes on the wheels of 1 of the axles. However, the vehicle must be capable of complying with the performance requirements of § 22-302 of this subtitle.
- (e) Automatic trailer brake application upon breakaway. --
- (1) Every trailer, semitrailer, and pole trailer equipped with air or vacuum actuated brakes, and every trailer, semitrailer, and pole trailer with a registered gross weight in excess of 10,000 pounds, manufactured or assembled after June 1, 1970, shall be equipped with brakes acting on all wheels and of a character to be applied automatically and promptly, and remain applied for at least 15 minutes on breakaway from the towing vehicle.
- (2) Every trailer, semitrailer, and pole trailer with a registered gross weight of more than 3,000 pounds and not more than 10,000 pounds, manufactured or assembled after June 1, 1970, shall be equipped with brakes acting on all wheels of at least 1 axle and of a character to be applied automatically and promptly, and remain applied for at least 15 minutes on breakaway from the towing vehicle.
- (f) Tractor brakes protected. -- Every motor vehicle manufactured or assembled after June 1, 1970, and used to tow a trailer, semitrailer, or pole trailer equipped with brakes, shall be equipped with means for providing that, in case of breakaway of the towed vehicle, the towing vehicle will be capable of being stopped by the use of its service brakes.
- (g) Trailer air reservoirs safeguarded. -- Air brake systems installed on trailers manufactured or assembled after June 1, 1970, shall be so designed that the supply reservoir used to provide air for the brakes is safeguarded against backflow of air from the reservoir through the supply line.
- (h) Two means of emergency brake operation. --
- (1) Air Brakes. After June 1, 1971, every towing vehicle, when used to tow another vehicle equipped with air controlled brakes, in other than driveaway or towaway operations, shall be equipped with two means for emergency application of the trailer brakes. One of these means shall apply the brakes automatically in the event of a reduction of the towing vehicle air supply to a fixed pressure, which shall be not lower than 20 pounds per square inch nor higher than 45 pounds per square inch. The other means shall be a manually controlled device for applying and releasing the brakes, readily operable by a person seated in the driving seat, and its emergency

position or method of operation shall be clearly indicated. In no instance may the manual arrangement be arranged to permit its use to prevent operation of the automatic means. The automatic and the manual means required by this section may be, but are not required to be, separate.

- (2) Vacuum Brakes. After June 1, 1970, every towing vehicle used to tow other vehicles equipped with vacuum brakes, in operations other than driveaway or towaway operations, shall have, in addition to the single control device required by subsection (i) of this section, a second control device that can be used to operate the brakes on towed vehicles in emergencies. The second control shall be independent of brake air, hydraulic, and other pressure, and independent of other controls, unless the braking system is so arranged that failure of the pressure on which the second control depends will cause the towed vehicle brakes to be applied automatically. The second control is not required to provide modulated braking.
- (i) Single control to operate all brakes. -- Except as provided in subsection (l) of this section, after June 1, 1971, every motor vehicle, trailer, semitrailer, and pole trailer, and every combination of these vehicles, except motorcycles, equipped with brakes shall have the braking system so arranged that one control device can be used to operate all service brakes. This requirement does not prohibit vehicles from being equipped with an additional control device to be used to operate brakes on the towed vehicles. This regulation does not apply to driveaway or towaway operations unless the brakes on the individual vehicles are designed to be operated by a single control on the towing vehicle, nor does it apply to the operation of electric trailer brakes.
- (j) Reservoir capacity and check valve. --
- (1) Air Brakes. Every bus, truck, or truck tractor with air operated brakes shall be equipped with at least one reservoir sufficient to insure that, when fully charged to the maximum pressure as regulated by the air compressor governor cut-out setting, a full service brake application may be made without lowering the reservoir pressure by more than 20 percent. Each reservoir shall be provided with means for readily draining accumulated oil or water.
- (2) Vacuum Brakes. After June 1, 1971, every truck with three or more axles equipped with vacuum assistor type brakes and every truck tractor and truck used for towing a vehicle equipped with vacuum brakes shall be equipped with a reserve capacity or a vacuum reservoir sufficient to insure that, with the reserve capacity or reservoir fully charged and with the engine stopped, a full service brake application may be made without depleting the vacuum supply by more than 40 percent.
- (3) Reservoir Safeguarded. All motor vehicles, trailers, semitrailers, and pole trailers, when equipped with air or vacuum reservoirs or reserve capacity as required by this section, shall have reservoirs or reserve capacity so safeguarded by a check valve or equivalent device that, in the event of failure or leakage in its connection to the source of compressed air or vacuum, the stored air or vacuum is not depleted by the leak or failure.

## (k) Warning devices. --

- (1) Air Brakes. Every bus, truck, or truck tractor using compressed air for the operation of its own brakes or the brakes on any towed vehicle, shall be provided with a warning signal, other than a pressure gauge, readily audible or visible to the driver, which will operate at any time that the air reservoir pressure of the vehicle is below 50 percent of the air compressor governor cut-out pressure. In addition, the vehicle shall be equipped with a pressure gauge visible to the driver, which indicates in pounds per square inch the pressure available for braking.
- (2) Vacuum Brakes. After June 1, 1971, every truck tractor and truck used for towing a vehicle equipped with vacuum operated brakes and every truck with three or more axles using vacuum in the operation of its brakes, except those in driveaway or towaway operations, shall be equipped with a warning signal, other than a gauge indicating vacuum, readily audible or visible to the driver, which will operate at any time the vacuum in the vehicle's supply reservoir or reserve capacity is less than 8 inches of mercury.
- (3) Combination of Warning Devices. When a vehicle required to be equipped with a warning device is equipped with both air and vacuum power for the operation of its own brakes or the brakes on a towed vehicle, the warning devices may be, but are not required to be, combined into a single device that serves both purposes. A gauge or gauges indicating pressure or vacuum is not an adequate means of satisfying this requirement.

## (1) Surge brakes. --

- (1) In this subsection, "surge brakes" means a braking system designed to activate the brakes of a vehicle being towed as a result of the forward pressure of the vehicle against the towing vehicle during deceleration.
  - (2) A trailer or semitrailer may be equipped with surge brakes if:
- (i) The trailer or semitrailer has a manufacturer's gross vehicle weight rating, or registered weight, whichever is less, of 10,000 pounds or less;
- (ii) The combined gross vehicle weight rating, combined registered weight, and the gross combination weight of the trailer or semitrailer and the towing vehicle is 26,000 pounds or less;
- (iii) The vehicle or combination of vehicles is not designed or used to transport 16 or more passengers including the driver of the towing vehicle;
- (iv) The actual gross weight of the trailer or semitrailer and load does not exceed the manufacturer's gross vehicle weight rating or registered weight, whichever is less;

- (v) The actual gross weight of the towing vehicle and load does not exceed the manufacturer's gross vehicle weight rating or registered weight, whichever is less;
- (vi) The trailer or semitrailer brakes are designed and connected in such a manner that in case of accidental breakaway of the towed vehicle, the brakes will apply automatically;
- (vii) The vehicle or combination of vehicles is not used to transport hazardous materials of a type and quantity that requires placarding;
- (viii) The vehicle or combination of vehicles is not used to transport liquids or gases contained in packaging that exceeds a capacity of 119 gallons;
- (ix) The trailer or semitrailer has a gross weight rating, registered weight, or gross weight, whichever is greater, that is not more than one and one-half times the gross weight rating or registered weight, whichever is less, of the towing vehicle; and
- (x) For vehicles used for commercial purposes, the trailer or semitrailer is used only in intrastate commerce.

## § 22-210. Mounting of reflectors, clearance lamps, and side marker lamps

- (a) Height. -- Reflectors required by § 22-208 of this subtitle shall be mounted at a height of not more than 60 inches nor less than 15 inches above the ground on which the vehicle stands. However, if the highest part of the permanent structure of the vehicle is less than 15 inches, the reflector at that point shall be mounted as high as that part of the permanent structure will permit.
- (b) Rear reflectors on pole trailer. -- The rear reflectors on a pole trailer may be mounted on each side of the bolster or load.
- (c) Rear reflectors and tail lamps. -- Any required red reflector on the rear of a vehicle may be incorporated with the tail lamp, but the reflector shall meet all the other reflector requirements of this title.
- (d) Clearance lamps. -- Clearance lamps shall be mounted so as to indicate the extreme width of the motor vehicle, not including mirrors, and as near the top of the vehicle as practicable.
- (e) Rear identification and clearance lamps. -- When rear identification lamps are mounted at the extreme height of the vehicle, rear clearance lamps may be mounted at an optional height.
- (f) Front clearance lamps. -- When mounting of front clearance lamps at the highest point of a trailer results in those lamps failing to mark the extreme width of the trailer,

they may be mounted at an optional height, but must indicate the extreme width of the trailer.

- (g) Clearance lamps on truck tractors. -- Clearance lamps on truck tractors shall be so located as to indicate the extreme width of the truck tractor cab.
- (h) Combination clearance and side marker lamps. -- Clearance lamps and side marker lamps may be mounted in combination if illumination is given as required in this subtitle with reference to both. However, no clearance lamp may be combined with any tail lamp or identification lamp.

## § 24-107. Attachment and towing requirements for drivers towing another vehicle

#### **Definitions**

- (a)(1) In this section the following words have the meanings indicated.
- (2) "Primary connecting system" means the combination of devices and their attaching structures that are used to connect a towed vehicle to a towing vehicle.
- (3) "Safety chain" means a flexible tension member connected from the front of the towed vehicle to the rear of the towing vehicle for the purpose of retaining the connection between the towed and towing vehicles if the connection provided by the primary connecting system fails.
- (4) "Tow dolly" means a vehicle having a tongue or towbar attachment designed to tow other vehicles and used to tow:
- (i) Another vehicle when the front or rear wheels of the towed vehicle are placed in a cradle-like device that lifts the wheels from the highway; or
- (ii) A trailer or semitrailer when the towing vehicle has a fifth-wheel attachment device.
- (5) "Towbar" means a strut or column-like device temporarily attached between the rear of a towing vehicle and the front of the towed vehicle.

Attachment and connection requirements for drivers towing another vehicle

- (b) When towing another vehicle, the driver shall ensure that:
- (1) The towed vehicle is securely attached to the towing vehicle by a primary connecting system;
- (2) The connection used is:
- (i) Structurally adequate for the weight drawn; and

- (ii) Mounted properly and securely, without excessive slack, but with enough slack to allow for articulation of the connection;
- (3) The locking device that prevents separation of the towed and towing vehicles is working properly and is locked in place; and
- (4) One or more safety chains are attached to the towed vehicle and the frame of the towing vehicle and have no more slack than is necessary for proper turning.

Attachment of safety chains to pintle hook

(c) Attachment of the safety chains to the pintle hook does not satisfy the requirements of this section.

Connection between vehicles not to exceed 15 feet

(d) Except for the connection between any two vehicles carrying poles, pipes, machinery, or other objects that cannot be readily dismembered, the connection between vehicles may not exceed 15 feet.

Connections made with fifth-wheel connection device

(e) A connection made with a fifth-wheel connection device is not required to use safety chains or cables as additional securing devices.

Vehicles towed by rope, chain, or cable

(f) If a vehicle is towed by a rope, chain, or cable, a driver must be in and capable of steering the towed vehicle.

Design, construction, and installation of primary connecting system

(g) A primary connecting system used in a combination of vehicles shall be designed, constructed, and installed to insure that a towed vehicle does not shift or swerve more than 6 inches to either side of the path of the towing vehicle while the towing vehicle is moving in a straight line on a level, smooth, paved surface.

Use of white, red, or orange fluorescent warning flags or cloths

(h) While one vehicle is towing another and the connection is a chain, rope, or cable, a white, red, or orange-fluorescent warning flag or cloth at least 18 inches square shall be displayed on the connection.

Restrictions relating to vehicle operation in combination with one or more other vehicles

(i) Except as otherwise provided in this title, or when one tow dolly is used to tow one other vehicle, a vehicle may not be operated in combination with more than one other vehicle.

Regulations relating to standards for hitching devices and towing procedures

- (j)(1) The Administration may adopt regulations that establish standards for hitching devices and towing procedures for towing and towed vehicles.
- (2) Except as otherwise provided in this section, this subsection applies to tractor-trailer combinations, semitrailer combinations, and any other vehicle combinations designed and used for carrying freight or merchandise in furtherance of any commercial enterprise.

#### Fines

(k) A person convicted of a violation of this section that results in the death or, as defined in § 20-102(c) of this article, serious bodily injury of another person is subject to a fine not exceeding \$1,000.

## § 22-205. Reflector requirements

#### In general

- (a)(1) After July 1, 1971, every motor vehicle, trailer, semitrailer, and pole trailer, and any special mobile equipment being towed, shall carry on the rear, either as part of the tail lamps or separately, two or more red reflectors meeting the requirements of this section, except that:
- (i) Motorcycles shall carry at least one reflector; and
- (ii) Vehicles of the types mentioned in § 22-208 of this subtitle shall be equipped with reflectors meeting the requirements of §§ 22-210 and 22-211(a) and (b) of this subtitle.
- (2) Before this date every vehicle, trailer, or semitrailer, including devices moved by muscular power, shall carry on the rear at least one reflector, and after this date, every vehicle mentioned in this paragraph that is not mentioned in paragraph (1) of this subsection shall carry on the rear at least one reflector.

Height requirements for reflectors

(b) Every reflector shall be mounted on the vehicle at a height of not more than 60 inches nor less than 15 inches and shall be of such size and characteristics and so mounted as to be visible at night from all distances within 600 feet to 100 feet from the vehicle when directly in front of lawful upper beams of headlamps, except that visibility from a greater distance is hereinafter required of reflectors on certain types of vehicles. When two reflectors are required they shall be as widely spaced laterally as practicable.

#### § 22-204. Tail lamp requirements

Tail lamp requirement for motor vehicles, trailers, semitrailers, or other vehicles

(a) Except as otherwise provided in this section, after June 1, 1971, every motor vehicle, trailer, semitrailer, and pole trailer, and any other vehicle that is being drawn at the end of a combination of vehicles, shall be equipped with at least 2 tail lamps mounted on the rear, which, when lighted

as required in § 22-201.1 of this subtitle, shall emit a red light plainly visible from a distance of 1,000 feet to the rear.

## Tail lamp requirements for combination of vehicles

(b) Every motor vehicle, trailer, semitrailer, and pole trailer, and any other vehicle that is being drawn at the end of a combination of vehicles, and that was manufactured or assembled before June 1, 1971, shall have at least 1 tail lamp mounted on the rear which, when lighted as required in § 22-201.1 of this subtitle, shall emit a red light plainly visible from a distance of at least 300 feet to the rear.

## Tail lamps used with vehicle combinations

(c) On a combination of vehicles, only the tail lamps on the rearmost vehicle need actually be seen from the distance specified in subsections (a) and (b) of this section.

## Spacing of tail lamps

(d) On vehicles equipped with more than 1 tail lamp, the lamps shall be mounted on the same level and as widely spaced laterally as practicable.

#### Height requirements for tail lamps

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

#### Location of tail lamp or separate lamp to illuminate rear registration plate

(f) Either a tail lamp or a separate lamp shall be constructed and placed to illuminate, with a white light, the rear registration plate and render it clearly legible from a distance of 50 feet to the rear.

Any tail lamp or tail lamps, together with any separate lamp or lamps for illuminating the rear registration plate, shall be wired to be lighted whenever the head lamps or auxiliary driving lamps are lighted.

## Special mobile equipment

- (g) Notwithstanding any provision of this section to the contrary, special mobile equipment that is being drawn at the end of a combination of vehicles is not required to be equipped with tail lamps unless:
- (1) The special mobile equipment obstructs the tail lamps, stop lamps, turn signals, or, except for the registration plate lamp, any lamps of the towing vehicle required by law to be visible from the rear; or
- (2) The special mobile equipment extends more than 12 feet from the rear of the towing vehicle.

#### § 22-206. Stop lamp and electric turn signal requirements

- (a) Every motor vehicle, trailer, semitrailer, and pole trailer shall be equipped with at least one stop lamp meeting the requirements of § 22-219(a) of this subtitle, and the following vehicles shall meet the following additional requirements:
- (1)(i) Every motor vehicle, other than a motorcycle, registered in this State and sold as a new vehicle after June 1, 1967, shall be equipped with at least two stop lamps;
- (ii) Every passenger vehicle manufactured on or after September 1, 1985, shall be equipped with a red center high mount stop lamp mounted with its center on the vertical centerline of the vehicle as the vehicle is viewed from the rear; and
- (iii) Every pickup truck, van, and sport utility vehicle manufactured on or after September 1, 1993, shall be equipped with a red center high mount stop lamp mounted with its center on the vertical centerline of the vehicle as the vehicle is viewed from the rear; and
- (2) After July 1, 1971, every trailer, semitrailer, and pole trailer shall be equipped with at least two stop lamps.

## Electric turn signals

- (b) Every motor vehicle, trailer, semitrailer, and pole trailer registered in this State and sold as a new vehicle after June 1, 1961, shall be equipped with electric turn signal lamps meeting the requirements of § 22-219(b) through (h) of this subtitle, except that:
- (1) Motorcycles manufactured before January 1, 1973, need not be equipped with electric turn signal lamps; and
- (2) The requirements of this section apply only to those trailers, semitrailers, and pole trailers that are registered in this State and sold as new vehicles on or after July 1, 1971.

#### Special mobile equipment

- (c) Any special mobile equipment that is being towed shall be equipped with at least 2 stop lamps that meet the requirements of § 22-219(a) of this subtitle and electric turn signals that meet the requirements of § 22-219(b) of this subtitle if the special mobile equipment:
- (1) Obstructs the tail lamps, stop lamps, turn signals, or except for the registration plate lamp, any lamp of the towing vehicle required by law to be visible from the rear; or
- (2) Extends more than 12 feet from the rear of the towing vehicle.

#### § 21-1104. Obstructed view of driver prohibited

(iv) Materials placed on the side or rear windows of a Class M (multipurpose) vehicle or Class E (truck) vehicle provided that the vehicle is equipped with two outside rearview mirrors, one each attached to the right and left side of the vehicle;