

RCW 46.37.340 Braking equipment required. Every motor vehicle, trailer, semitrailer, and pole trailer, and any combination of such vehicle operating upon a highway within this state shall be equipped with brakes in compliance with the requirements of this chapter.

(1) Service brakes—adequacy. Every such vehicle and combination of vehicles, except special mobile equipment as defined in RCW 46.04.552, shall be equipped with service brakes complying with the performance requirements of RCW 46.37.351 and adequate to control the movement of and to stop and hold such vehicle under all conditions of loading, and on any grade incident to its operation.

(2) Parking brakes—adequacy. Every such vehicle and combination of vehicles 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 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. 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.

(3) Brakes on all wheels. Every vehicle shall be equipped with brakes acting on all wheels except:

(a) Trailers, cargo extensions, semitrailers, or pole trailers of a gross weight not exceeding three thousand pounds, provided that:

(i) The total weight on and including the wheels of the trailer or trailers or cargo extension shall not exceed forty 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 RCW 46.37.351;

(b) Trailers, semitrailers, or pole trailers manufactured and assembled prior to July 1, 1965, shall not be required to be equipped with brakes when the total weight on and including the wheels of the trailer or trailers does not exceed two thousand pounds;

(c) Any vehicle being towed in driveaway or towaway operations, provided the combination of vehicles is capable of complying with the performance requirements of RCW 46.37.351;

(d) Trucks and truck tractors manufactured before July 25, 1980, and having three or more axles need not have brakes on the front wheels, except that when such vehicles are equipped with at least two steerable axles, the wheels of one steerable axle need not have brakes. Trucks and truck tractors manufactured on or after July 25, 1980, and having three or more axles are required to have brakes on the front wheels, except that when such vehicles are equipped with at least two steerable axles, the wheels of one steerable axle need not

have brakes. Such trucks and truck tractors may be equipped with an automatic device to reduce the front-wheel braking effort by up to fifty percent of the normal braking force, regardless of whether or not antilock system failure has occurred on any axle, and:

(i) Must not be operable by the driver except upon application of the control that activates the braking system; and

(ii) Must not be operable when the pressure that transmits brake control application force exceeds eighty-five pounds per square inch (psi) on air-mechanical braking systems, or eighty-five percent of the maximum system pressure in vehicles utilizing other than compressed air.

All trucks and truck tractors having three or more axles must be capable of complying with the performance requirements of RCW 46.37.351;

(e) Special mobile equipment as defined in RCW 46.04.552 and all vehicles designed primarily for off-highway use with braking systems which work within the power train rather than directly at each wheel;

(f) Vehicles manufactured prior to January 1, 1930, may have brakes operating on only two wheels;

(g) For a forklift manufactured after January 1, 1970, and being towed, wheels need not have brakes except for those on the rearmost axle so long as such brakes, together with the brakes on the towing vehicle, shall be adequate to stop the combination within the stopping distance requirements of RCW 46.37.351.

(4) Automatic trailer brake application upon breakaway. Every trailer, semitrailer, and pole trailer equipped with air or vacuum actuated brakes and every trailer, semitrailer, and pole trailer with a gross weight in excess of three thousand pounds, manufactured or assembled after January 1, 1964, shall be equipped with brakes acting on all wheels and of such character as to be applied automatically and promptly, and remain applied for at least fifteen minutes, upon breakaway from the towing vehicle.

(5) Tractor brakes protected. Every motor vehicle manufactured or assembled after January 1, 1964, 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.

(6) Trailer air reservoirs safeguarded. Air brake systems installed on trailers manufactured or assembled after January 1, 1964, shall be so designed that the supply reservoir used to provide air for the brakes shall be safeguarded against backflow of air from the reservoir through the supply line.

(7) Two means of emergency brake operation.

(a) Air brakes. After January 1, 1964, every towing vehicle equipped with air controlled brakes, in other than driveaway or towaway operations, and all other vehicles equipped with air controlled brakes, shall be equipped with two means for emergency application of the brakes. One of these means shall apply the brakes automatically in the event of a reduction of the vehicle's air supply to a fixed pressure which shall be not lower than twenty pounds per square inch nor higher than forty-five 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 means be so arranged as 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.

(b) Vacuum brakes. After January 1, 1964, 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 (8) of this section, a second control device which 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 be so arranged that failure of the pressure upon 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.

(8) Single control to operate all brakes. After January 1, 1964, every motor vehicle, trailer, semitrailer, and pole trailer, and every combination of such vehicles, 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 in the towing vehicle.

(9) Reservoir capacity and check valve.

(a) 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 such reservoir pressure by more than twenty percent. Each reservoir shall be provided with means for readily draining accumulated oil or water.

(b) Vacuum brakes. After January 1, 1964, every truck with three or more axles equipped with vacuum assist 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 forty percent.

(c) 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 such 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 shall not be depleted by the leak or failure.

(10) Warning devices.

(a) 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 the primary supply air reservoir pressure of the vehicle is below fifty percent of the air compressor governor cut-out pressure. In addition, each such vehicle shall be equipped with a pressure gauge visible to the driver, which indicates in pounds per square inch the pressure available for braking.

(b) Vacuum brakes. After January 1, 1964, 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 eight inches of mercury.

(c) 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 which will serve both purposes. A gauge or gauges indicating pressure or vacuum shall not be deemed to be an adequate means of satisfying this requirement. [2016 c 22 s 5; 1989 c 221 s 1; 1979 c 11 s 1. Prior: 1977 ex.s. c 355 s 27; 1977 ex.s. c 148 s 2; 1965 ex.s. c 170 s 49; 1963 c 154 s 21; 1961 c 12 s 46.37.340; prior: 1955 c 269 s 34; prior: 1937 c 189 s 34, part; RRS s 6360-34, part; RCW 46.36.020, 46.36.030, part; 1929 c 180 s 6; 1927 c 309 s 16; 1923 c 181 s 5; 1921 c 96 s 23; 1915 c 142 s 22; RRS s 6362-16.]

Intent—Effective date—2016 c 22: See notes following RCW 46.04.094.

Severability—1977 ex.s. c 355: See note following RCW 46.37.010.