device shall be maintained at the expense of the person or governmental agency owning said obstruction or water diversion in accordance with RCW 75.20.040 and 75.20.060.

Passed the Senate February 26, 1963.
Passed the House March 11, 1963.
Approved by the Governor March 25, 1963.

CHAPTER 154.
[S. B. 424.]

MOTOR VEHICLES—EQUIPMENT.

Be it enacted by the Legislature of the State of Washington:

SECTION 1. Section 46.37.010, chapter 12, Laws of 1961 and RCW 46.37.010 are each amended to read as follows:

(1) It is a misdemeanor for any person to drive or move or for the owner to cause or knowingly permit to be driven or moved on any highway any vehicle or combination of vehicles which is in such unsafe condition as to endanger any person, or which does not contain those parts or is not at all times equipped with such lamps and other equipment in
proper condition and adjustment as required in this chapter, or which is equipped in any manner in violation of this chapter, or for any person to do any act forbidden or fail to perform any act required under this chapter.

(2) Nothing contained in this chapter shall be construed to prohibit the use of additional parts and accessories on any vehicle not inconsistent with the provisions of this chapter.

(3) The provisions of the chapter with respect to equipment on vehicles shall not apply to implements of husbandry, road machinery, road rollers or farm tractors except as herein made applicable.

Sec. 2. Section 46.37.020, chapter 12, Laws of 1961 and RCW 46.37.020 are each amended to read as follows:

Every vehicle upon a highway within this state at any time from a half hour after sunset to a half hour before sunrise and at any other time when, due to insufficient light or unfavorable atmospheric conditions, persons and vehicles on the highway are not clearly discernible at a distance of five hundred feet ahead shall display lighted lamps and illuminating devices as hereinafter respectively required for different classes of vehicles, subject to exceptions with respect to parked vehicles, and further that stop lights, turn signals and other signaling devices shall be lighted as prescribed for the use of such devices.

Sec. 3. Section 46.37.050, chapter 12, Laws of 1961 and RCW 46.37.050 are each amended to read as follows:

(1) After January 1, 1964, every motor vehicle, trailer, semitrailer and pole trailer, and any other vehicle which is being drawn at the end of a combination of vehicles, shall be equipped with at least two tail lamps mounted on the rear, which, when lighted as required in RCW 46.37.020, shall emit a red light.
Vehicle lighting equipment.
Tail lamps.

plainly visible from a distance of one thousand feet to the rear, except that passenger cars manufactured or assembled prior to January 1, 1939, and motorcycles and motor-driven cycles, shall have at least one tail lamp. On a combination of vehicles only the tail lamps on the rearmost vehicle need actually be seen from the distance specified. On vehicles equipped with more than one tail lamp, the lamps shall be mounted on the same level and as widely spaced laterally as practicable.

(2) Every tail lamp upon every vehicle shall be located at a height of not more than seventy-two inches nor less than twenty inches.

(3) Either a tail lamp or a separate lamp shall be so constructed and placed as to illuminate with a white light the rear registration plate and render it clearly legible from a distance of fifty 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 so wired as to be lighted whenever the head lamps or auxiliary driving lamps are lighted.

Sec. 4. Section 46.37.060, chapter 12, Laws of 1961 and RCW 46.37.060 are each amended to read as follows:

(1) Every motor vehicle, trailer, semitrailer and pole trailer shall carry on the rear, either as a part of the tail lamps or separately, two or more red reflectors meeting the requirements of this section, except that motorcycles and motor-driven cycles shall carry at least one such reflector: Provided, however, That vehicles of the types mentioned in RCW 46.37.090 shall be equipped with reflectors meeting the requirements of RCW 46.37.110 and 46.37.120.

(2) Every such reflector shall be mounted on the vehicle at a height not less than twenty inches nor more than sixty inches measured as set forth in
RCW 46.37.030(2), and shall be of such size and characteristics and so mounted as to be visible at night from all distances within three hundred fifty feet to one hundred feet from such vehicle when directly in front of lawful upper beams of head lamps, except that visibility from a greater distance is hereinafter required of reflectors on certain types of vehicles.

Sec. 5. Section 46.37.070, chapter 12, Laws of 1961 and RCW 46.37.070 are each amended to read as follows:

(1) After January 1, 1964, every motor vehicle, trailer, semitrailer and pole trailer shall be equipped with two or more stop lamps meeting the requirements of RCW 46.37.200, except that passenger cars manufactured or assembled prior to January 1, 1964, and motorcycles and motor-driven cycles shall be equipped with at least one such stop lamp. On a combination of vehicles, only the stop lamps on the rearmost vehicle need actually be seen from the distance specified in RCW 46.37.200(1).

(2) After January 1, 1960, every motor vehicle, trailer, semitrailer and pole trailer shall be equipped with electric turn signal lamps meeting the requirements of RCW 46.37.200(2), except that motor vehicles, trailers, semitrailers and pole trailers manufactured or assembled prior to January 1, 1954, and motorcycles and motor-driven cycles need not be equipped with electric turn signal lamps.

Sec. 6. Section 46.37.080, chapter 12, Laws of 1961 and RCW 46.37.080 are each amended to read as follows:

Those sections of this chapter which follow immediately, including RCW 46.37.090, 46.37.100, 46.37.110, 46.37.120 and 46.37.130, relating to clearance lamps, marker lamps, and reflectors, shall apply as stated in said sections to vehicles of the type therein enumerated, namely buses, trucks, truck tractors,
and trailers, semitrailers and pole trailers, respectively, when operated upon any highway, and said vehicles shall be equipped as required and all lamp equipment required shall be lighted at the times mentioned in RCW 46.37.020.

Sec. 7. Section 46.37.090, chapter 12, Laws of 1961 and RCW 46.37.090 are each amended to read as follows:

In addition to other equipment required in RCW 46.37.040, 46.37.050, 46.37.060 and 46.37.070, the following vehicles shall be equipped as herein stated under the conditions stated in RCW 46.37.080, and in addition, the reflectors elsewhere enumerated for such vehicles shall conform to the requirements of RCW 46.37.120(1).

(1) Buses and trucks eighty inches or more in over-all width:

(a) On the front, two clearance lamps, one at each side, and on vehicles manufactured or assembled after January 1, 1964, three identification lamps meeting the specifications of subdivision (6) of this section.

(b) On the rear, two clearance lamps, one at each side, and after January 1, 1964, three identification lamps meeting the specifications of subdivision (6) of this section.

(c) On each side, two side marker lamps, one at or near the front and one at or near the rear.

(d) On each side, two reflectors, one at or near the front and one at or near the rear.

(2) Trailers and semitrailers eighty inches or more in overall width:

(a) On the front, two clearance lamps, one at each side.

(b) On the rear, two clearance lamps, one at each side, and after January 1, 1964, three identification lamps meeting the specifications of subdivision (6) of this section.
(c) On each side, two side marker lamps, one at
or near the front and one at or near the rear.

(d) On each side, two reflectors, one at or near
the front and one at or near the rear.

(3) Truck tractors:
On the front, two cab clearance lamps, one at
each side, and on vehicles manufactured or assembled
after January 1, 1964, three identification lamps
meeting the specifications of subdivision (6) of this
section.

(4) Trailers, semitrailers and pole trailers thirty
feet or more in over-all length:
On each side, one amber side marker lamp and
one amber reflector, centrally located with respect
to the length of the vehicle.

(5) Pole trailers:
(a) On each side, one amber side marker lamp
at or near the front of the load.

(b) One amber reflector at or near the front of
the load.

(c) On the rearmost support for the load, one
combination marker lamp showing amber to the
front and red to the rear and side, mounted to indi-
cate maximum width of the pole trailer.

(6) Whenever required or permitted by this
chapter, identification lamps shall be grouped in
a horizontal row, with lamp centers spaced not less
than six nor more than twelve inches apart, and
mounted on the permanent structure of the vehicle
as close as practicable to the vertical centerline:
Provided, however, That where the cab of a vehicle
is not more than forty-two inches wide at the front
roof line, a single identification lamp at the center
of the cab shall be deemed to comply with the re-
quirements for front identification lamps.

Sec. 8. Section 46.37.120, chapter 12, Laws of 1961
and RCW 46.37.120 are each amended to read as
follows:
(1) Every reflector upon any vehicle referred to in RCW 46.37.090 shall be of such size and characteristics and so maintained as to be readily visible at nighttime from all distances within six hundred feet to one hundred feet from the vehicle when directly in front of lawful upper beams of head lamps. Reflectors required to be mounted on the sides of the vehicle shall reflect the required color of light to the sides, and those mounted on the rear shall reflect a red color to the rear.

(2) Front and rear clearance lamps and identification lamps shall be capable of being seen and distinguished under normal atmospheric conditions at the times lights are required at all distances between five hundred feet and fifty feet from the front and rear, respectively, of the vehicle.

(3) Side marker lamps shall be capable of being seen and distinguished under normal atmospheric conditions at the times lights are required at all distances between five hundred feet and fifty feet from the side of the vehicle on which mounted.

Sec. 9. Section 46.37.140, chapter 12, Laws of 1961 and RCW 46.37.140 are each amended to read as follows:

Whenever the load upon any vehicle extends to the rear four feet or more beyond the bed or body of such vehicle there shall be displayed at the extreme rear end of the load, at the times specified in RCW 46.37.020, two red lamps, visible from a distance of at least five hundred feet to the rear, two red reflectors meeting the requirements of RCW 46.37.120(1), visible from the rear and located so as to indicate maximum width, and on each side one red lamp, visible from a distance of at least five hundred feet to the side, located so as to indicate maximum overhang. There shall be displayed at all other times on any vehicle having a load which extends beyond its sides or more than four feet
beyond its rear, red flags, not less than twelve inches square, marking the extremities of such loads, at each point where a lamp would otherwise be required by this section, under RCW 46.37.020.

Sec. 10. Section 46.37.150, chapter 12, Laws of 1961 and RCW 46.37.150 are each amended to read as follows:

(1) Every vehicle shall be equipped with one or more lamps, which, when lighted, shall display a white or amber light visible from a distance of one thousand feet to the front of the vehicle, and a red light visible from a distance of one thousand feet to the rear of the vehicle. The location of said 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. The foregoing provisions shall not apply to a motor-driven cycle.

(2) Whenever a vehicle is lawfully parked upon a street or highway during the hours between a half hour after sunset and a half hour before sunrise and in the event there is sufficient light to reveal any person or object within a distance of one thousand feet upon such street or highway, no lights need be displayed upon such parked vehicle.

(3) Whenever a vehicle is parked or stopped upon a roadway or shoulder adjacent thereto, outside an incorporated city or town, whether attended or unattended, during the hours between a half hour after sunset and a half hour before sunrise and there is insufficient light to reveal any person or object within a distance of one thousand feet upon such highway, such vehicle so parked or stopped shall be equipped with and shall display lamps meeting the requirements of subsection (1) of this section.

(4) Any lighted head lamps upon a parked vehicle shall be depressed or dimmed.
Sec. 11. Section 46.37.160, chapter 12, Laws of 1961 and RCW 46.37.160 are each amended to read as follows:

(1) Every farm tractor and every self-propelled unit of farm equipment or implement of husbandry shall at all times mentioned in RCW 46.37.020 be equipped with two single-beam or multiple-beam head lamps meeting the requirements of RCW 46.37-.220 or 46.37.250, respectively, or, as an alternative, RCW 47.36.260, and at least two red lamps visible when lighted from a distance of not less than one thousand feet to the rear; and at least two red reflectors visible from all distances within six hundred feet to one hundred feet to the rear when directly in front of lawful upper beams of head lamps.

(2) Every combination of farm tractor and towed farm equipment or towed implement of husbandry shall at all times mentioned in RCW 46.37.020 be equipped with lamps as follows:

(a) The farm tractor element of every such combination shall be equipped as required in subsection (1) of this section.

(b) The towed unit of farm equipment or implement of husbandry element of such combination shall be equipped on the rear with two red lamps visible when lighted from a distance of not less than one thousand feet to the rear, and two red reflectors visible to the rear from all distances within six hundred feet to one hundred feet to the rear when directly in front of lawful upper beams of head lamps.

(c) Said combinations shall also be equipped with a lamp displaying a white or amber light, or any shade of color between white and amber, visible when lighted from a distance of not less than one thousand feet to the front. This lamp shall be so positioned to indicate, as nearly as practicable,
the extreme left projection of the combination carrying it.

(3) The two red lamps and the two red reflectors required in the foregoing subsections of this section on a self-propelled unit of farm equipment or implement of husbandry or combination of farm tractor and towed farm equipment shall be so positioned as to show from the rear as nearly as practicable the extreme left projection of the combination carrying them.

Sec. 12. Section 46.37.170, chapter 12, Laws of 1961 and RCW 46.37.170 are each amended to read as follows:

Every vehicle, including animal-drawn vehicles and vehicles referred to in RCW 46.37.010(3), not specifically required by the provisions of RCW 46.37-.020 through 46.37.330 to be equipped with lamps, or other lighting devices, shall at all times specified in RCW 46.37.020 be equipped with at least one lamp displaying a white light visible from a distance of not less than one thousand feet to the front of said vehicle, and shall also be equipped with two lamps displaying red light visible from a distance of not less than one thousand feet to the rear of said vehicle, or as an alternative, one lamp displaying a red light visible from a distance of not less than one thousand feet to the rear and two red reflectors visible from all distances of six hundred to one hundred feet to the rear when illuminated by the upper beams of head lamps.

Sec. 13. Section 46.37.180, chapter 12, Laws of 1961 and RCW 46.37.180 are each amended to read as follows:

(1) Spot lamps. Any motor vehicle may be equipped with not to exceed two spot lamps and every lighted spot lamp shall be so aimed and used that no part of the high intensity portion of the
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Fog, auxiliary passing, driving, lamps.

beam will strike the windshield, or any windows, mirror, or occupant of another vehicle in use.

(2) Fog lamps. Any motor vehicle may be equipped with not to exceed two fog lamps mounted on the front at a height of not less than twelve inches nor more than thirty inches above the level surface upon which the vehicle stands and so aimed that when the vehicle is not loaded none of the high intensity portion of the light to the left of the center of the vehicle shall at a distance of twenty-five feet ahead project higher than a level of four inches below the level of the center of the lamp from which it comes. Lighted fog lamps meeting the above requirements may be used with lower head lamp beams as specified in RCW 46.37.220.

(3) Auxiliary passing lamps. Any motor vehicle may be equipped with not to exceed two auxiliary passing lamps mounted on the front at a height not less than twenty-four inches nor more than forty-two inches above the level surface upon which the vehicle stands. The provisions of RCW 46.37.220 shall apply to any combination of head lamps and auxiliary passing lamps.

(4) Auxiliary driving lamps. Any motor vehicle may be equipped with not to exceed two auxiliary driving lamps mounted on the front at a height not less than sixteen inches nor more than forty-two inches above the level surface upon which the vehicle stands. The provisions of RCW 46.37.220 shall apply to any combination of head lamps and auxiliary driving lamps.

Sec. 14. Section 46.37.190, chapter 12, Laws of 1961 and RCW 46.37.190 are each amended to read as follows:

(1) Every authorized emergency vehicle shall, in addition to any other equipment and distinctive marking required by this chapter, be equipped with at least one lamp capable of displaying a red light
visible from at least five hundred feet in normal sunlight and a siren capable of giving an audible signal.

(2) Every school bus shall, in addition to any other equipment and distinctive markings required by this chapter, be equipped with signal lamps mounted as high and as widely spaced laterally as practicable, which shall be capable of displaying to the front two alternately flashing red lights located at the same level and to the rear two alternately flashing red lights located at the same level and these lights shall have sufficient intensity to be visible at five hundred feet in normal sunlight.

(3) A police vehicle when used as an authorized emergency vehicle may but need not be equipped with alternately flashing red lights specified herein.

(4) The alternately flashing lighting described in subsections (2) and (3) of this section shall not be used on any vehicle other than a school bus or an authorized emergency vehicle.

(5) The use of the signal equipment described herein shall impose upon drivers of other vehicles the obligation to yield right of way and stop as prescribed in RCW 46.60.210 and 46.48.140.

Sec. 15. Section 46.37.200, chapter 12, Laws of 1961 and RCW 46.37.200 are each amended to read as follows:

(1) Any vehicle may be equipped and when required under this chapter shall be equipped with a stop lamp or lamps on the rear of the vehicle which shall display a red or amber light, or any shade of color between red and amber, visible from a distance of not less than one hundred feet and on any vehicle manufactured or assembled after January 1, 1964, three hundred feet to the rear in normal sunlight, and which shall be actuated upon application of a service brake, and which may but need not be incorporated with one or more other rear lamps.

(2) Any vehicle may be equipped and when
required under RCW 46.37.070(2) shall be equipped with electric turn signals which shall indicate an intention to turn by flashing lights showing to the front and rear of a vehicle or on a combination of vehicles on the side of the vehicle or combination toward which the turn is to be made. The lamps showing to the front shall be mounted on the same level and as widely spaced laterally as practicable and, when signaling, shall emit white or amber light, or any shade of color between white and amber. The lamp showing to the rear shall be mounted on the same level and as widely spaced laterally as practicable, and, when signaling, shall emit a red or amber light, or any shade of color between red and amber. Turn signal lamps on vehicles eighty inches or more in over-all width shall be visible from a distance of not less than five hundred feet in normal sunlight. Turn signal lamps on vehicles less than eighty inches wide shall be visible at a distance of not less than three hundred feet in normal sunlight. Turn signal lamps may, but need not be, incorporated in other lamps on the vehicle.

SEC. 16. Section 46.37.210, chapter 12, Laws of 1961 and RCW 46.37.210 are each amended to read as follows:

(1) Any motor vehicle may be equipped with not more than two side cowl or fender lamps which shall emit an amber or white light without glare.

(2) Any motor vehicle may be equipped with not more than one running-board courtesy lamp on each side thereof which shall emit a white or amber light without glare.

(3) Any motor vehicle may be equipped with one or more back-up lamps either separately or in combination with other lamps, but any such back-up lamp or lamps shall not be lighted when the motor vehicle is in forward motion.
(4) 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 chapter. 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 fifteen hundred feet under normal atmospheric conditions at night.

(5) Any vehicle eighty inches or more in over-all width, if not otherwise required by RCW 46.37.090, may be equipped with not more than three identification lamps showing to the front which shall emit an amber light without glare and not more than three identification lamps showing to the rear which shall emit a red light without glare. Such lamps shall be mounted as specified in RCW 46.37.090(6).

Sec. 17. Section 46.37.230, chapter 12, Laws of 1961 and RCW 46.37.230 are each amended to read as follows:

(1) Whenever a motor vehicle is being operated on a roadway or shoulder adjacent thereto during the times specified in RCW 46.37.020, the driver shall use a distribution of light, or composite beam, directed high enough and of sufficient intensity to reveal persons and vehicles at a safe distance in
advance of the vehicle, subject to the following requirements and limitations:

(2) Whenever a driver of a vehicle approaches an oncoming vehicle within five hundred feet, such driver shall use a distribution of light, or composite beam, so aimed that the glaring rays are not projected into the eyes of the oncoming driver. The lowermost distribution of light, or composite beam, specified in RCW 46.37.220(2) shall be deemed to avoid glare at all times, regardless of road contour and loading.

(3) Whenever the driver of a vehicle approaches another vehicle from the rear within three hundred feet such driver shall use a distribution of light permissible under this chapter other than the uppermost distribution of light specified in RCW 46.37.220(1).

SEC. 18. Section 46.37.240, chapter 12, Laws of 1961 and RCW 46.37.240 are each amended to read as follows:

Head lamp systems which provide only a single distribution of light shall be permitted on motor vehicles manufactured and sold prior to one year after March 18, 1955 in lieu of multiple-beam road-lighting equipment herein specified if the single distribution of light complies with the following requirements and limitations:

(1) The head lamps shall be so aimed that when the vehicle is not loaded none of the high intensity portion of the light shall at a distance of twenty-five feet ahead project higher than a level of five inches below the level of the center of the lamp from which it comes, and in no case higher than forty-two inches above the level on which the vehicle stands at a distance of seventy-five feet ahead.

(2) The intensity shall be sufficient to reveal persons and vehicles at a distance of at least two hundred feet.
SEC. 19. Section 46.37.280, chapter 12, Laws of 1961 and RCW 46.37.280 are each amended to read as follows:

(1) During the times specified in RCW 46.37.020, any lighted lamp or illuminating device upon a motor vehicle, other than head lamps, spot lamps, auxiliary lamps, flashing turn signals, emergency vehicle warning lamps, warning lamps authorized by the state commission on equipment and school bus warning lamps, which projects a beam of light of an intensity greater than three hundred candlepower shall be so directed that no part of the high intensity portion of the beam will strike the level of the roadway on which the vehicle stands at a distance of more than seventy-five feet from the vehicle.

(2) Except as required in RCW 46.37.190 no person shall drive or move any vehicle or equipment upon any highway with any lamp or device thereon displaying a red light visible from directly in front of the center thereof.

(3) Flashing lights are prohibited except as required in RCW 46.37.190, 46.37.200, 46.37.210, and 46.37.300, and warning lamps authorized by the state commission on equipment.

SEC. 20. Section 46.37.300, chapter 12, Laws of 1961 and RCW 46.37.300 are each amended to read as follows:

(1) The state commission on equipment shall adopt standards and specifications applicable to head lamps, clearance lamps, identification and other lamps on snow-removal and other highway maintenance and service equipment when operated on the highways of this state in lieu of the lamps otherwise required on motor vehicles by this chapter. Such standards and specifications may permit the use of flashing lights for purposes of identification on snow-removal and other highway maintenance and service equipment when in service upon the highways. The

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standards and specifications for lamps referred to in this section shall correlate with and, so far as possible, conform with those approved by the American association of state highway officials.

(2) It shall be unlawful to operate any snow-removal and other highway maintenance and service equipment on any highway unless the lamps thereon comply with and are lighted when and as required by the standards and specifications adopted as provided in this section.

Sec. 21. Section 46.37.340, chapter 12, Laws of 1961 and RCW 46.37.340 are each amended to read as follows:

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 section 30 of this amendatory act of 1963, shall be equipped with service brakes complying with the performance requirements of section 22 of this amendatory act 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, except motorcycles and motor-driven cycles, 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, 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 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 section 22 of this amendatory act.

(b) Any vehicle being towed in driveaway or towaway operations, provided the combination of vehicles is capable of complying with the performance requirements of section 22 of this amendatory act.

(c) Trucks and truck-tractors 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 steer-
Vehicle lighting, equipment. Brake equipment required.


able axle need not have brakes. However, such trucks and truck-tractors must be capable of complying with the performance requirements of section 22 of this amendatory act.

(d) Special mobile equipment as defined in section 30 of this amendatory act of 1963.

(e) 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 such motorcycle or motor-driven cycle is capable of complying with the performance requirements of section 22 of this amendatory act.

(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, 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 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, semi-trailer and pole trailer, and every combination of such vehicles, except motorcycles and motor-driven
cycles, 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 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 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 com-
pressed 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 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 drive-away 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.

Sec. 22. There is added to chapter 46.37 RCW a New section.

Every motor vehicle and combination of vehicles,
at all times and under all conditions of loading, upon application of the service brake, shall be capable of:

   (1) Developing a braking force that is not less than the percentage of its gross weight tabulated herein for its classification,

   (2) Decelerating to a stop from not more than twenty miles per hour at not less than the feet per second per second tabulated herein for its classification, and

   (3) Stopping from a speed of twenty miles per hour in not more than the distance tabulated herein for its classification, such distance to be measured from the point at which movement of the service brake pedal or control begins.

Tests for deceleration and stopping distance shall be made on a substantially level (not to exceed plus or minus one percent grade), dry, smooth, hard surface that is free from loose material.

<table>
<thead>
<tr>
<th>Classification of Vehicles</th>
<th>Braking force as a percentage of gross vehicle or combination weight</th>
<th>Deceleration in feet per second</th>
<th>Braking distance in feet from an initial speed of 20 m.p.h.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Passenger vehicles with a seating capacity of 10 people or less including driver, not having a manufacturer's gross vehicle weight rating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>52.8%</td>
<td>17</td>
<td>25</td>
</tr>
<tr>
<td>B-1 All motorcycles and motor-driven cycles</td>
<td>43.5%</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>B-2 Single unit vehicles with a manufacturer's gross vehicle weight rating of</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Classification of Vehicles

<table>
<thead>
<tr>
<th>Classification of Vehicles</th>
<th>Braking force as a percentage of gross vehicle or combination weight</th>
<th>Deceleration in feet per second</th>
<th>Brake system application and braking distance in feet from an initial speed of 20 m.p.h.</th>
</tr>
</thead>
<tbody>
<tr>
<td>10,000 pounds or less</td>
<td>43.5%</td>
<td>14</td>
<td>30</td>
</tr>
<tr>
<td>C-1 Single unit vehicles with a manufacturer's gross weight rating of more than 10,000 pounds</td>
<td>43.5%</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>C-2 Combinations of a two-axle towing vehicle and a trailer with a gross trailer weight of 3,000 pounds or less</td>
<td>43.5%</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>C-3 Buses, regardless of the number of axles, not having a manufacturer's gross weight rating</td>
<td>43.5%</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>C-4 All combinations of vehicles in drive-away-towaway operations</td>
<td>43.5%</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td>D All other vehicles and combinations of vehicles</td>
<td>43.5%</td>
<td>14</td>
<td>50</td>
</tr>
</tbody>
</table>

**Sec. 23.** Section 46.37.370, chapter 12, Laws of 1961 and RCW 46.37.370 are each amended to read as follows:

(1) The state commission on equipment is authorized to require an inspection of the braking system on any motor-driven cycle and to disapprove
any such braking system on a vehicle which it finds will not comply with the performance ability standard set forth in section 22 of this amendatory act, or which in its opinion is equipped with a braking system that is not so designed or constructed as to insure reasonable and reliable performance in actual use.

(2) The director of licenses may refuse to register or may suspend or revoke the registration of any vehicle referred to in this section when he determines that the braking system thereon does not comply with the provisions of this section.

(3) No person shall operate on any highway any vehicle referred to in this section in the event the state commission on equipment has disapproved the braking system upon such vehicle.

SEC. 24. There is added to chapter 46.37 RCW a new section to read as follows:

(1) The term “hydraulic brake fluid” as used in this section shall mean the liquid medium through which force is transmitted to the brakes in the hydraulic brake system of a vehicle.

(2) Hydraulic brake fluid shall be distributed and serviced with due regard for the safety of the occupants of the vehicle and the public.

(3) The state commission on equipment shall, in compliance with the provisions of chapter 34.04 RCW, the administrative procedure act, which govern the adoption of rules, adopt and enforce regulations for the administration of this section and shall adopt and publish standards and specifications for hydraulic brake fluid which shall correlate with, and so far as practicable conform to, the then current standards and specifications of the society of automotive engineers applicable to such fluid.

(4) No person shall distribute, have for sale, offer for sale, or sell any hydraulic brake fluid unless it complies with the requirements of this section and
the standard specifications adopted by the state commission on equipment. No person shall service any vehicle with brake fluid unless it complies with the requirements of this section and the standards and specifications adopted by the state commission on equipment.

Sec. 25. Section 46.37.400, chapter 12, Laws of 1961 and RCW 46.37.400 are each amended to read as follows:

Every motor vehicle shall be equipped with a mirror so located as to reflect to the driver a view of the highway for a distance of at least two hundred feet to the rear of such vehicle.

Sec. 26. Section 46.04.130, chapter 12, Laws of 1961 and RCW 46.04.130 are each amended to read as follows:

“Combination of vehicles” means every combination of motor vehicle and motor vehicle, motor vehicle and trailer or motor vehicle and semitrailer.

Sec. 27. There is added to chapter 46.04 RCW a new section to read as follows:

“Driveaway-towaway operation” means any operation in which any motor vehicle, trailer or semitrailer, singly or in combination, new or used, constitutes the commodity being transported when one set or more wheels of any such vehicle are on the roadway during the course of transportation, whether or not any such vehicle furnishes the motive power.

Sec. 28. There is added to chapter 46.04 RCW a new section to read as follows:

“Motor-driven cycle” means every motorcycle, including every motor scooter, with a motor which produces not to exceed five brake horsepower (developed by a prime mover, as measured by a brake applied to the driving shaft), and every bicycle with motor attached.
New section. SEC. 29. There is added to chapter 46.04 RCW a new section to read as follows:

"Passenger car" means every motor vehicle except motorcycles and motor-driven cycles, designed for carrying ten passengers or less and used for the transportation of persons.

New section. SEC. 30. There is added to chapter 46.04 RCW a new section to read as follows:

"Special mobile equipment" means every vehicle not designed or used primarily for the transportation of persons or property and only incidentally operated or moved over a highway, including but not limited to: Ditch digging apparatus, well boring apparatus and road construction and maintenance machinery such as asphalt spreaders, bituminous mixers, bucket loaders, tractors other than truck-tractors, ditchers, leveling graders, finishing machines, motor graders, road rollers, scarifiers, earth moving carry-alls and scrapers, power shovels and drag lines, and self-propelled cranes and earth moving equipment. The term does not include house trailers, dump trucks, truck mounted transit mixers, cranes or shovels or other vehicles designed for the transportation of persons or property to which machinery has been attached.

Repeal. SEC. 31. Sections 46.37.192 and 46.37.350, chapter 12, Laws of 1961 and RCW 46.37.192 and 46.37.350 are each repealed.

Effective date. SEC. 32. This act shall take effect on January 1, 1964.

Passed the Senate February 28, 1963.
Passed the House March 11, 1963.
Approved by the Governor March 25, 1963.