## WEST VIRGINIA CODE: §17C-15-31

## §17C-15-31. Brakes -- Generally.

- (a) Brake equipment required. -- (1) Every motor vehicle, other than a motorcycle, motor-driven cycle or moped, when operated upon a highway shall be equipped with brakes adequate to control the movement of and to stop and hold such vehicle, including two separate means of applying the brakes, each of which means shall be effective to apply the brakes to at least two wheels. If these two separate means of applying the brakes are connected in any way, they shall be so constructed that failure of any one part of the operating mechanism shall not leave the motor vehicle without brakes on at least two wheels.
- (2) Every motorcycle, motor-driven cycle and moped, when operated upon a highway, shall be equipped with at least one brake which may be operated by hand or foot.
- (3) Every trailer or semitrailer of a gross weight of three thousand pounds or more when operated upon a highway shall be equipped with brakes adequate to control the movement of and to stop and to hold such vehicle and so designed as to be applied by the driver of the towing motor vehicle from its cab, and said brakes shall be so designed and connected that in case of an accidental breakaway of the towed vehicle the brakes shall be automatically applied.
- (4) Every new motor vehicle, trailer or semitrailer hereinafter sold in this state and operated upon the highways shall be equipped with service brakes upon all wheels, with the following exceptions: (1) That trucks and truck-tractors having three or more axles need not have brakes on the front wheels, except when such vehicles are equipped with at least two steerable axles, the wheels of one such axle need not be equipped with brakes, (2) any motorcycle, motor-driven cycle or moped, and (3) that any semitrailer of less than one thousand five hundred pounds gross weight need not be equipped with brakes.
- (5) In any combination of motor-driven vehicles, means shall be provided for applying the rearmost trailer brakes, of any trailer equipped with brakes, in approximate synchronism with the brakes on the towing vehicle and developing the required braking effort on the rearmost wheels at the fastest rate; or means shall be provided for applying braking effort first on the rearmost trailer equipped with brakes; or both of the above means capable of being used alternatively may be employed.
- (6) Every such vehicle and combination of vehicles, except motorcycles, motor-driven cycles and mopeds, 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 a failure of any one part shall not leave the vehicle without operative brakes.

- (7) The brake shoes operating within or upon the drums on the vehicle wheels of any motor vehicle may be used for both service and hand operation.
- (b) Performance ability of brakes. -- Every motor vehicle or combination of motor-drawn vehicles shall be capable, at all times and under all conditions of loading, of being stopped on a dry, smooth, level road free from loose material, upon application of the service (foot) brake, within the distances specified below, or shall be capable of being decelerated at a sustained rate corresponding to these distances:

Feet to stop Deceleration

from 20 miles in feet per

per hour second

Vehicles or combinations

of vehicles having

brakes on all wheels 30 14

Vehicles or combinations

of vehicles not having brakes

on all wheels 40 10.7

(c) Maintenance of brakes. -- All brakes shall be maintained in good working order and shall be so adjusted as to operate as equally as practicable with respect to the wheels on opposite sides of the vehicle.