

Sec. 14-80-2a. Service brakes

(a) Each motor vehicle or combination of motor vehicles shall be equipped with service brakes maintained in good and proper operating condition adequate to stop such vehicle or vehicles within the following specified stopping distances at the speeds indicated from the point where such brakes are first applied when such vehicle or vehicles are operated on a dry asphalt or concrete pavement surface free from loose material where the surface grade does not exceed one (1) percent.

1. Passenger motor vehicles.

<i>Speed</i>	<i>Required Stopping Distance</i>
<i>Miles per Hour</i>	<i>(Ft.)</i>
20	24
30	54
40	91
55	172

2. Each motor vehicle equipped with a hydraulic service brake system having a G.V.W.R. of 10,000 lbs. or less including school buses but not including passenger motor vehicles.

<i>Speed</i>	<i>Required Stopping Distance</i>
<i>Miles per Hour</i>	<i>(Ft.)</i>
20	29
30	65
40	144
55	272

3. Each motor vehicle equipped with a hydraulic service brake system having a G.V.W.R. greater than 10,000 lbs. including school buses but not including passenger motor vehicles.

<i>Speed</i>	<i>Required Stopping Distance</i>
<i>Miles per Hour</i>	<i>(Ft.)</i>
20	36
30	81
40	173
55	326

4. Trucks, buses and trailers equipped with air brake systems.

<i>Speed</i>	<i>Required Stopping Distance</i>
<i>Miles per Hour</i>	<i>(Ft.)</i>
20	35
30	75
40	131
55	246

5. Motorcycles.

Regulations of Connecticut State Agencies

<i>Speed</i> <i>Miles per Hour</i>	<i>Required Stopping Distance</i> <i>(Ft.)</i>
15	11
20	19
30	43
40	75
55	155

(b) The service brake on trucks and buses, including public service motor vehicles and service buses manufactured after June 1, 1976 equipped with air brake systems shall have:

1. An air compressor of sufficient capacity to increase pressure in the supply and service reservoirs from 85 P.S.I. to 100 P.S.I. when the engine is operating at the vehicle manufacturer's recommended R.P.M. within a time, in seconds, determined by the quotient

$$\frac{\text{Actual reservoir capacity} \times 25}{\text{Required reservoir capacity}}$$

2. One or more service reservoir systems, from which air is delivered to the brake chambers, and either an automatic condensate drain valve for each service reservoir or a supply reservoir between the service reservoir system and the source of air pressure.

3. The combined volume of all service reservoirs and supply reservoirs shall be at least 12 times the combined volume of all service brake chambers at maximum travel of the pistons or diaphragms.

4. Each reservoir shall be capable of withstanding an internal hydrostatic pressure of 5 times the compressor cutout pressure or 500 P.S.I., whichever is greater, for 10 minutes.

5. Each service reservoir system shall be protected against loss of air pressure due to failure or leakage in the system between the service reservoir and the source of air pressure, by check valves or equivalent devices whose proper functioning can be checked without disconnecting any air line or fitting.

6. Each reservoir shall have a condensate drain valve that can be manually operated.

7. If the vehicle is intended to tow another vehicle equipped with air brakes, a system to protect the pressure in the towing vehicle from the effects of a loss of air pressure in the towed vehicle.

8. A pressure gauge in each service brake system, readily visible to a person seated in the normal driving position, that indicates the service reservoir system air pressure. The accuracy of the gauge shall be within plus or minus 7 percent of the compressor cutout pressure.

9. A signal, other than a pressure gauge, that gives a continuous warning to a person in the normal driving position when the ignition is in the "on" or "run" position and the air pressure in the service reservoir system is below 60 P.S.I. The signal shall be either visible within the driver's forward field of view, or both audible and visible.

10. Each vehicle equipped with an antilock system shall have a signal that gives a continuous warning to a person in the normal driving position when the ignition is in the on or run position in the event of a total electrical failure of the antilock system. The signal shall be either visible within the driver's forward field of view or both audible, for a duration of at least 10 seconds, and continuously visible. The signal shall operate in the specified manner each time the ignition is returned to the "on" or "run" position.

(Effective July 1, 1977)