driving position and provides a continuous warning to the driver whenever
the vacuum in the vehicle’s supply reservoir is less than 203 mm (8 inches) of
mercury.

(e) Hydraulic brakes applied or assisted by air or vacuum. Each vehicle equipped
with hydraulically activated service brakes which are applied or assisted by
compressed air or vacuum, and to which FMVSS No. 105 was not applicable
on the date of manufacture, must be equipped with a warning signal that
conforms to paragraph (b) of this section for the hydraulic portion of the
system; paragraph (c) of this section for the air assist/air applied portion; or
paragraph (d) of this section for the vacuum assist/vacuum applied portion.
This paragraph shall not be construed as requiring air pressure gauges or vac-
uum gauges, only warning signals.

(f) Exceptions. The rules in paragraphs (c), (d) and (e) of this section do
not apply to property carrying commercial motor vehicles which have less
than three axles and (1) were manufactured before July 1, 1973, and (2) have a
manufacturer’s gross vehicle weight rating less than 4,536 kg (10,001 pounds).

§ 393.52 Brake performance.

(a) Upon application of its service
brakes, a motor vehicle or combination
of motor vehicles must under any con-
tdition of loading in which it is found
on a public highway, be capable of—
(1) Developing a braking force at
least equal to the percentage of its
gross weight specified in the table in
paragraph (d) of this section;
(2) Decelerating to a stop from 20
miles per hour at not less than the rate
specified in the table in paragraph (d)
of this section; and
(3) Stopping from 20 miles per hour in
a distance, measured from the point at
which movement of the service brake
pedal or control begins, that is not
greater than the distance specified in
the table in paragraph (d) of this sec-
tion; or, for motor vehicles or motor
vehicle combinations that have a
GVWR or GVW greater than 4,536 kg
(10,001 pounds),

(b) Upon application of its emergency
brake system and with no other brake
system applied, a motor vehicle or
combination of motor vehicles must,
under any condition of loading in
which it is found on a public highway,
be capable of stopping from 20 miles
per hour in a distance, measured from
the point at which movement of the
emergency brake control begins, that
is not greater than the distance speci-
fied in the table in paragraph (d) of this
section.

(c) Conformity to the stopping-dis-
tance requirements of paragraphs (a)
and (b) of this section shall be deter-
mined under the following conditions:
(1) Any test must be made with the
vehicle on a hard surface that is sub-
stantially level, dry, smooth, and free
of loose material.
(2) The vehicle must be in the center
of a 12-foot-wide lane when the test be-
gins and must not deviate from that
lane during the test.

(d) Vehicle brake performance table:

<table>
<thead>
<tr>
<th>Type of motor vehicle</th>
<th>Service brake systems</th>
<th>Emergency brake systems</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Braking force as a percentage of gross vehicle or combination weight</td>
<td>Deceleration in feet per second</td>
</tr>
<tr>
<td>A. Passenger-carrying vehicles:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(1) Vehicles with a seating capacity of 10 persons or less, including driver, and built on a passenger car chassis</td>
<td>65.2</td>
<td>21</td>
</tr>
</tbody>
</table>
Federal Motor Carrier Safety Administration, DOT

§ 393.53 Automatic brake adjusters and brake adjustment indicators.

(a) Automatic brake adjusters (hydraulic brake systems). Each commercial motor vehicle manufactured on or after October 20, 1993, and equipped with a hydraulic brake system, shall meet the automatic brake adjustment system requirements of Federal Motor Vehicle Safety Standard No. 105 (49 CFR 571.105, S5.1) applicable to the vehicle at the time it was manufactured.

(b) Automatic brake adjusters (air brake systems). Each commercial motor vehicle manufactured on or after October 20, 1994, and equipped with an air brake system must meet the automatic brake adjustment system requirements of Federal Motor Vehicle Safety Standard No. 121 (49 CFR 571.121, S5.1.8 or S5.2.2) applicable to the vehicle at the time it was manufactured.

(c) Brake adjustment indicator (air brake systems). On each commercial motor vehicle manufactured on or after October 20, 1994, and equipped with an