

BRAKE TESTING DEVICES

(Revised April 13, 1932)
(Superseding LC 245)

The approval of brake testing devices rests with the commissioner of motor vehicles in any given State (see A.S.A. "Safety code for brakes and brake testing" 14-1927). The Bureau of Standards does not "approve" devices of this kind, but is prepared to calibrate individual instruments for manufacturers and enforcement officials.

Three classes of equipment are commercially available for the testing or adjusting of brakes:

(1) Various instruments of the decelerometer type.

These instruments are designed to be placed in or attached to an automobile which is then driven at a speed approximating 20 miles per hour and the brakes applied. The instrument indicates on a scale the number of feet required to bring the car to a stop from a speed of 20 miles per hour. The accuracy of each individual instrument depends, of course, on the correctness of its scale.

(2) Brake testing and adjusting machines.

These machines provide some means, such as electric motors, for driving a set of drums on which the car is mounted. The torque required to turn the wheels of the car with brakes applied is measured. These machines provide means for adjusting

the brakes to equality in addition to measuring their holding power. However, the stopping distance from a speed of 20 miles per hour, as required by the brake code, is not determined directly but is calculated from the holding power of the brakes and the weight of the car.

(3) Hand Machines.

These are designed to register the torque necessary to rotate each wheel when it is jacked up and the brakes are applied. These machines are generally not adapted for measuring the holding power of the brakes when fully applied except possibly on the lightest cars. Therefore, they do not serve the purpose of testing brakes for compliance with the A.S.A. brake code, although they may be very convenient and useful for adjusting brakes for equalization.

List of Manufacturers of Brake Testing Devices

(This list includes names and addresses available April 1, 1932. It does not purport to be a complete list of all manufacturers of such devices.)

(1) Decelerometers.

American Instrument Company,
774 Girard Street, N.W.,
Washington, D.C.

Friedli Brake Recording Device Company,
5311 Alaska Street,
Seattle, Washington.

Muther Manufacturing Company,
44 Binford Street,
Boston, Mass.

Tapley & Company,
Tolton, Southampton, England.
U. S. distributor: Ernest C. Cheswell,
Melrose Highlands, 77,
Boston, Mass.

(2) Testing Machines.

Bendix-Cowdrey Brake Tester, Inc.,
40 Bendix Drive,
South Bend, Indiana.

Interstate Brake Testing Machine Company,
Los Angeles, California.

Riess Manufacturing Company,
100 Davis Avenue,
Dayton, Ohio.

Weaver Manufacturing Company,
Springfield, Illinois.

