

Submitted for recognition as an American National Standard

Drawbar Pull Performance Criteria

Foreword—Performance requirements established herein are minimum required in FMVSS 121.

1. **Scope**—This SAE Performance Criteria code applies to vehicles that are tested in accordance with SAE J1729 and SAE J1626.

1.1 **Purpose**—This document recommends a method to determine which brake force (SAE J1729, 6.8.1 and SAE J1626, 16.1.3d) to use in determining the capability of the parking brake. It also provides guidelines to minimum performance requirements for parking brake.

2. References

2.1 **Applicable Publications**—The following publications form a part of this specification to the extent specified herein. Unless otherwise indicated, the latest version of SAE publications shall apply.

2.1.1 SAE PUBLICATIONS—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J1626—Braking, Stability, and Control Performance Test Procedures for Air- and Hydraulic-Brake Equipped Trucks, Truck-Tractors, and Buses

SAE J1729—Parking Brake Drawbar Pull Test Procedure

2.1.2 FMVSS PUBLICATION—Available from the Superintendent of Documents, U. S. Government Printing Office, Mail Stop: SSOP, Washington, DC 20402-9320.

FMVSS 121

3. **Criteria**—For each axle under test there will be four readings for drawbar force in both forward and reverse direction per previous procedures.

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4. **Parking Force**—Maximum capability of the brake is determined by using the highest value (brake force) in the lowest value data set (forward pull versus reverse pull).
- a. Trailers, Tractors with Two Axles, Trucks, and Buses—The quotient drawbar force/GAWR shall not be less than 0.28 for any axle that is not a steerable front axle.
 - b. Tractors with More than Two Axles—The quotient drawbar force/GVWR shall not be less than 0.14.

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