



# SURFACE VEHICLE STANDARD

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Superseding J2318 NOV2016

## Air Brake Actuator Test Performance Requirements - Truck and Bus

### RATIONALE

Table 3, Type 30 service force output at 276 kPa previously listed as 7451 N now corrected to 4751 N.

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## 1. SCOPE

This procedure provides test performance requirements for service, spring applied parking, and double diaphragm combination air brake actuators with respect to durability, function, and environmental performance when tested in accordance to SAE J1469.

### 1.1 Purpose

This SAE recommended procedure provides uniform minimum requirements for air brake actuators used in air brake systems for trucks, truck-tractor, bus, and trailers.

## 2. REFERENCES

### 2.1 Applicable Documents

The following publications form a part of the specification to the extent specified herein. Unless otherwise indicated, the latest issue of SAE publications shall apply.

#### 2.1.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), [www.sae.org](http://www.sae.org).

SAE J1469 Air Brake Actuator Test Procedure, Truck-Tractor, Bus, and Trailers

#### 2.1.2 U.S. Government Publications

Copies of these documents are available online at <https://quicksearch.dla.mil>.

FMVSS 121 Air Brake Systems, 49 CFR Parts 571.121

## 3. DEFINITIONS

Refer to SAE J1469, Section 3.

## 4. LEAK RATE - PARKING AND SERVICE CHAMBER

For allowable leak rate, see Table 1.

### 4.1 Refer to SAE J1469, Section 4.

**Table 1 - Leak rate - parking and service chambers**

| Chamber Tested  | Maximum Allowable Leakage Rate (Calculated) | Alternate Test Procedure Maximum Allowable Pressure Change | Applicable SAE J1469 Test Procedure |
|-----------------|---------------------------------------------|------------------------------------------------------------|-------------------------------------|
| Parking Chamber | 23 cc/min<br>(1.40 in <sup>3</sup> /min)    |                                                            | 4.1.2                               |
|                 |                                             | 10.34 kPa<br>(1.5 psig)                                    | 4.1.3                               |
| Service Chamber | 23 cc/min<br>(1.40 in <sup>3</sup> /min)    |                                                            | 4.2.1                               |
|                 |                                             | 10.34 kPa<br>(1.5 psig)                                    | 4.2.3                               |