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# NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

ICS 43.040.40 T 24

GB/T 5620-2020 / ISO 611:2003

Replacing GB/T 5620-2002

# Road vehicles - Vocabulary and definition for braking of automotive vehicles and their trailers

道路车辆 汽车和挂车制动名词术语及其定义 (ISO 611:2003, Road vehicles - Braking of automotive vehicles and their trailers - Vocabulary, IDT)

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### **Foreword**

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 5620-2002 "Road vehicles - Braking of automotive vehicles and their trailers - Vocabulary". Compared with GB/T 5620-2002, the main technical changes of this Standard are as follows:

- ADD endurance braking system and its control device types to the braking systems (see 3.2.4);
- ADD terms and definitions of braking systems relating to transmission means (see 4.2);
- Adjust the relevant terms of brake components to Clause 5 (see 5.5.1; Clause 9 of the 2002 edition);
- ADD the terms and definitions of "categories of retarder" and "auxiliary device consuming energy" (see 5.5.3.1, 5.14);
- Delete the term and definition of "non-continuous braking system" (see 5.3.5 of the 2002 edition);
- Modify the definition of "retarder" (see 5.5.3; 4.5.3 of the 2002 edition);
- ADD terms and definitions of "engine brake", "exhaust retarder", "hydrodynamic retarder", "hydrostatic retarder", "permanent-magnetic retarder", "regenerative braking retarder", and "mechanical regenerative braking retarder" (see 5.5.3.2.1, 5.5.3.2.3, 5.5.3.2.5.1, 5.5.3.2.5.2, 5.5.3.2.6.2, 5.5.3.2.6.3, 5.5.3.2.7);
- Delete the term and definition of "friction retarder" (see 4.5.3.6 of the 2002 edition);
- ADD terms such as "traction control system", "stability control system", "brake hold and release aid", "autonomous intelligent cruise control", and "coupling force control system" and their definitions (see 6.2, 6.3, 6.4, 6.5, 6.6);
- Adjust the terms related to the surface condition of brake linings to Clause 7 (see 7.1; 9.5 of the 2002 edition);
- ADD "brake application", "brake actuation", "brake release", "actuation threshold", "clamping", "brake release position", "braking performance", "braking slip", "adhesion utilization", "compatibility", as well as terms and definitions related to the coefficient of friction (see 9.2, 9.3, 9.4, 9.5, 9.6, 9.7,

9.8, 9.18, 9.19, 9.20, 9.21);

- LIST the terms related to pressures separately; ADD terms such as "cutout pressure" and "cut-in pressure" and their definitions (see Clause 10; 6.4 of the 2002 edition);
- ADD the terms and definitions of "graduated braking", "automatic braking", "automatically commanded braking", "selective braking", "predominance", "running clearance", "circuit" and "braking modulation" (see Clause 11).

This Standard, using translation method, is identical to ISO 611:2003 "Road vehicles - Braking of automotive vehicles and their trailers - Vocabulary".

China's document which has a consistent correspondence with the international document normatively referenced in this Standard is as follows:

- GB/T 3730.1-2001 Motor vehicles and trailers - Types - Terms and definitions (ISO 3833:1977, MOD).

This Standard has made the following editorial changes:

- CHANGE the standard name to "Road vehicles Vocabulary and definition for braking of automotive vehicles and their trailers";
- REWRITE the definitions of some terms in accordance with Chinese language conventions.

This Standard was proposed by Ministry of Industry and Information Technology of the PRC.

This Standard shall be under the jurisdiction of National Technical Committee of Auto Standardization (SAC/TC 114).

Drafting organizations of this Standard: Technical Center of China FAW Group Co., Ltd., Guangdong Automotive Test Center Co., Ltd., Zhejiang VIE Science & Technology Co., Ltd.

Main drafters of this Standard: Lin Dahai, Xiao Wenjian, Hou Zonggang, Liu Jianguang, Wang Yufeng, Lv Zheng.

The previous editions of the standard replaced by this Standard were released as follows:

- GB/T 5620.1-1985, GB/T 5620.2-1985;
- GB/T 5620-2002.

# Road vehicles - Vocabulary and definition for braking of automotive vehicles and their trailers

# 1 Scope

This Standard defines the principal terms used in relation to the braking and braking equipment of motor vehicles and trailers as defined in ISO 3833.

This Standard applies to braking systems or elements involved during the operation of braking; can also be used to describe all or part of the characteristic parameters during the braking process.

### 2 Normative references

The following documents are indispensable for the application of this document. For the dated references, only the editions with the dates indicated are applicable to this document. For the undated references, the latest edition (including all the amendments) are applicable to this document.

ISO 3833:1977 Road vehicles - Types - Terms and definitions

ISO/TR 13487:1997 Braking of road vehicles - Consideration on the definition of mean fully developed deceleration

# 3 Braking systems and equipment - General

3.1

#### **Braking equipment**

All braking systems fitted to a vehicle.

3.2

### **Braking system**

Combination of parts which fulfil one or more of the following functions:

- control (usually to reduce) a vehicle's speed,
- bring the vehicle to a halt or hold it stationary.

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