

ICS 43.040.30

CCS T26



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 24545-2019

Replacing GB/T 24545-2009

**Requirements and test methods of speed limitation system for
motor vehicles**

车辆车速限制系统技术要求及试验方法

Issued on: October 14, 2019

Implemented on: July 1, 2020

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

Table of Contents

1	Scope
2	Normative References
3	Terms and Definitions
4	General Requirements
4.3	Safety and Durability
4.3.2	Durability
4.4	Speed Limiting Value
5	Requirements of Motor Vehicles with Maximum
6	Requirements of Motor Vehicles with Adjustable
6.5	Vadj Setting
6.6	Initiate or Cancel Adjustable Speed Limitation Function
7	Test Methods of Motor Vehicles with Maximum Speed Limitation System
7.3	Road Test
7.3.1	Preparation of motor vehicles
7.3.2	Road
7.3.7	Stable speed test
7.4.2	Acceleration test
7.4.3	Stable speed test
8	Test Methods of Motor Vehicles with Adjustable Speed Limitation System
8.2	Alert Test when Speed Exceeds Vadj
8.3	Adjustable Speed Limitation Test
8.3.4	Requirements of adjustable speed limitation test
9	Date of Implementation

Foreword

All the technical content in this Standard is mandatory. This Standard was drafted in accordance with the rules in GB/T 1.1-2009. This Standard serves as a replacement of GB/T 24545-2009 Requirement of Speed Limitation System for Motor Vehicles. In comparison with GB/T 24545-2009, the main changes are as follows:

---The nature of this Standard is modified from recommended into mandatory;

---The title of this Standard is modified into Requirements and Test Methods of Speed

Limitation System for Motor Vehicles;

---Scope is modified (see Chapter 1);

---Normative references are modified (see Chapter 2);

---Terms and definitions are modified (see Chapter 3);

---General requirements are modified (see Chapter 4);

---The requirements of motor vehicles with the maximum speed limitation system are modified (see Chapter 5);

---The requirements of motor vehicles with adjustable speed limitation system are modified (see Chapter 6);

---Appendix A is modified into Chapter 7 "Test Methods of Motor Vehicles with Maximum Speed Limitation System"; partial content is modified (see Chapter 7);

---Appendix B is modified into Chapter 8 "Test Methods of Motor Vehicles with Adjustable Speed Limitation System"; partial content is modified (see Chapter 8). The technical content of this Standard takes UN Regulation No.89 Uniform Provisions Concerning the Approval of Vehicles with Regard to Limitation of Their Maximum Speed as a reference. This Standard was proposed by and shall be under the jurisdiction of the Ministry of Industry and Information Technology of People's Republic of China. The drafting organizations of this Standard. China Automotive Technology and Research Center Co., Ltd.; China National Heavy Duty Truck Group Co., Ltd.; SGMW Co., Ltd.; Zhengzhou Yutong Group Co., Ltd.; Technical Center of China FAW Group; Liuzhou Wuling Automobile Industry Co., Ltd.; Anhui Jianghuai Automobile Group Corp., Ltd. (JAC); Shaanxi Automobile Group Co., Ltd.; Nanjing IVECO Automobile Co., Ltd.; DAIMLER Greater China Ltd. (DGRC). The main drafters of this Standard. Wang Xueping, Gao Fating, Li Gaojian, Lu Changjun, Su Yuping, Mo Guoqing, Huanghai, Li Minghua, Yang Zhigang, Gao Liming, Sun Zhipeng, Zhai Xiaoyan, Wangtao, Huangxin, Wei Yongbiao, Li Yugang, Wangpeng, Dang Ruining, Li Yusheng, Wangrui, Liu Liya, Zheng Wenjie. The issuing of the previous versions of the standard replaced by this Standard is as follows:

---GB/T 24545-2009. Requirements and Test Methods of Speed Limitation System for Motor Vehicles

1 Scope

GB 24545-2019 is the Chinese national standard on requirements and test methods of speed limitation system for motor vehicles, in the field of road vehicles engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 14 October 2019 by the State Administration for Market

Regulation; Standardization Administration of China, and has been in force since 1 July 2020. Classification: ICS 43.040.30, CCS T26. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This Standard stipulates the terms and definitions, and general requirements of speed limitation system for motor vehicles; the requirements and test methods for motor vehicles with maximum speed limitation system and motor vehicles with adjustable speed limitation system. This Standard is applicable to.

---Maximum speed limitation device and adjustable speed limitation device.

---Type-M and Type-N vehicles equipped with maximum speed limitation device or adjustable speed limitation device.

---Type-M and Type-N vehicles equipped with maximum speed limitation function or adjustable speed limitation function.

2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB 4094 Motor Vehicles - Symbols for Controls, Indicators and Tell-tales;

GB 7258 Technical Specifications for Safety of Power-driven Vehicles Operating on Roads;

GB/T 12534 Motor Vehicles - General Rules of Road Test Method;

GB/T 15089 Classification of Power-driven Vehicles and Trailers;

GB/T 17619 Limits and Methods of Testing for Immunity of Electrical/electronic Sub-assemblies in Vehicles to Electromagnetic Radiation;

GB/T 21437.2-2008 Road Vehicles - Electrical Disturbances from Conduction and Coupling - Part

2. Electrical Transient Conduction along Supply Lines Only;

GB/T 25978 Road Vehicle - Plates and Label;

3 Terms and Definitions

What is defined in GB 7258 and GB/T 15089, and the following terms and definitions are

applicable to this document.

3.1 Speed Limitation System Speed limitation system refers to a system which implements speed limitation through the control of vehicle power plant's power supply, vehicle or engine (or electric motor) management. Speed limitation system includes maximum speed limitation system and adjustable speed limitation system.

3.2 Maximum Speed Limitation System Maximum speed limitation system refers to a system which guarantees that the speed of a motor vehicle does not exceed the set speed through maximum speed limitation device or maximum speed limitation function.

3.4 Maximum Speed Limitation Device Maximum speed limitation device refers to a device which is installed to limit the speed of a motor vehicle under the set speed through the control of vehicle power plant's power supply, or engine (or electric motor) management.

3.5 Maximum Speed Limitation Function Maximum speed limitation function refers to a function which limits the speed of a motor vehicle under the set speed through the control of vehicle power plant's power supply, vehicle or engine (or electric motor) management. This function may be implemented by a motor vehicle's original device.

3.6 Adjustable Speed Limitation Device Adjustable speed limitation device refers to a device which is installed to limit the speed of a motor vehicle under the adjustable limit speed through the control of vehicle power plant's power supply, or engine (or electric motor) management.

4 General Requirements

4.1 Speed Limitation System When a motor vehicle is in normal operation, the indispensable components of the speed limitation system shall be normally functioning. Speed limitation system shall satisfy the requirements of this Standard.

4.2 Requirements of Maximum Speed Limitation Device and Adjustable Speed Limitation Device

4.2.1 Environmental loads Environmental loads shall satisfy the requirements of environmental loads in GB/T 28046.1.

4.2.7 Electromagnetic radiation Electromagnetic radiation shall properly function in normal electromagnetic environment of motor vehicle; satisfy the stipulations in GB/T 17619.

4.3 Safety and Durability

4.3.1 Safety When speed limitation system fails, it shall not affect the driver's control of the engine through acceleration pedal.

4.3.2 Durability