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

GB 18565-2016

**Composite performance requirement and detecting methods for
road transport vehicles
(English Translation)**

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Foreword

The clause 5.1.3.1.1, 5.1.3.1.3, 5.1.3.2, 5.1.4.1.5, 5.1.6.2.2, 5.1.6.6.3, 5.1.7.1 to 5.1.7.3, 5.1.10.1.4, 5.1.10.1.5, 5.1.10.2.1, 5.1.10.2.4, 5.1.11.2, 5.1.11.5, 5.1.12.4, 5.3.1.2, the vertical offset of the beam and the horizontal offset of the beam in Table 6, and the clause 5.3. 2 are recommended, AND the rest is mandatory.

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

This standard replaces GB 18565-2001 "Multiple performance requirement and detecting methods for commercial vehicles".

As compared with GB 18565-2001, in addition to editorial changes, the main technical changes of this standard are as follows.

- CHANGE the standard name (SEE cover; cover of 2001 version);
- ADJUST the whole structure;
- ADD the "Introduction" (SEE the "Introduction" part);
- MODIFY the "Scope" statement; ADD the suitability descriptions of the vehicle type (SEE Chapter 1; Chapter 1 of 2001 version);
- ADD and DELETE some normative references (SEE Chapter 2; Chapter 2 of 2001 version);

- ADD the terms and definitions of "application in road transport vehicles" (SEE Chapter 3);
- ADD such performance requirements for the application in road transport vehicles as "Structural requirements", "Configuration requirements", "Fire proof requirements", "Power", "Fuel economy", "Braking", "Emission", and "Driving stability", etc. (SEE Chapter 4);
- Respectively PROPOSE the non-quantitative requirements and quantification requirements for vehicles in use in the "basic requirements", "performance requirements", and "other requirements" (SEE 5.1, 5.2, 5.3);
- In the "basic requirements", ADD such requirements as "uniqueness certification" and "electronic control system", etc. (SEE 5.1.1, 5.1.2);
- DELETE such requirements as the "cylinder compression pressure" and "the components of the engine ignition, fuel supply, lubrication, cooling and exhaust systems shall be complete", etc. (4.1 of 2001 version);
- DELETE such requirements as "the technical conditions of the vehicle body and the cab shall be such as able to ensure the driver have normal working conditions and passenger & cargo safety", the structural size of "safety exit", "sleeper bus sleeper layout", "aisle width", "passenger door first step height", and "fender", etc. (SEE 11.8.1, 11.8.9, 11.8.12 ~ 11.8.15, etc. of 2001 version);
- ADD the evaluation indicators of the power of the vehicles in use (SEE 5.2.1);
- MODIFY the fuel consumption limit of the vehicles in use (SEE 5.2.2; Chapter 4 and 12.2 of 2001 version);
- ADD the requirements for the braking system of the vehicles in use and the braking performance of category O3 and O4 trailers and semi-trailers (SEE 5.2.3);
- MODIFY the requirements for the limit of the emission pollutants of the

ignition engine of the vehicles in use and the emission visible pollutants of the compression-ignition engine vehicles; ADD the requirements of ignition engine using the sample working condition method and the compression-ignition engine using the load deceleration method (SEE 5.2.4; 9.1 and 12.7 of 2001 version);

- DELETE the requirements for the "gasoline vehicle fuel evaporation pollutant emission control" and "vehicle stationary noise" (SEE 9.1.3 and

9.2.1 of 2001 version);

- ADD the requirements for the "lateral slip of the steering wheel" of the double steering axle of the vehicles in use (SEE 5.2.5.1);
- MODIFY the evaluation indicators of the "wheel retardation rate" of the vehicles in use (SEE 5.3.3; 6.13.1.5 of 2001 version);
- ADD and MODIFY the test methods of the basic requirements and the performance requirements of the vehicles in use (SEE Chapter 6);
- MODIFY the test methods of the "power", "fuel consumption", and "braking performance" of the vehicles in use (SEE 6.5, 6.6 and 6.7, etc.);
- DELETE the methods of evaluating the "suspension characteristics" using a flat-type braking test-bed (SEE 7.6.2 of 2001 version);
- ADD the "judgment and treatment of the test results of the road vehicles in use" (SEE Chapter 7);

Introduction

Road transport vehicles have distinctive characteristics and features, AND their operating intensity, operating mileage, and failure frequency are much higher than the ordinary social vehicles. In all kinds of traffic accidents, the road transport vehicles constitute the main road traffic accidents, in addition to drivers, roads and climatic conditions and other factors, the vehicle's mechanical failure and technical performance badness are the important causes for the serious road traffic accidents.

Road transport safety is not only the top priority of safety production, but also the top priority of traffic safety management, the "comprehensive prevention of traffic accidents, to build a safe and harmonious road traffic environment" have been highly focused by the government and industry managers, AND the "safety, energy conservation, and environmental protection" has become a focus of the whole society. From the factors affecting the road transport safety such as "people, vehicle, road and environment", the safeguarding effects of the vehicle's technical conditions are more and more prominent. The effective maintaining the vehicle's technical conditions, reducing the occurrence of safety accidents, minimizing the occurrence of serious accidents, reducing vehicle fuel consumption, and reducing tailgas emissions are urgent for the technical management of the road transport vehicles under the new situations of safe development, green development and fast development of the road transport industry in China.

National standard "Multiple performance requirement and detecting methods for commercial vehicles" (hereinafter referred to as "GB 18565-2001") is an important technical regulation and main technical basis for the technical management and performance maintenance of the road transport vehicles in China. From the date of implementation of this standard, it plays an important role in such aspects as improving the road transport vehicle performance level and safeguarding the road traffic safety, etc. Meanwhile, in the implementation process of GB 18565-2001, some new situations and problems appear, AND many standard users propose the modification opinions and suggestions. Therefore, it is necessary to appropriately revise GB 18565-2001. The contents as specified in the revised GB 18565 are not only the comprehensive performance requirements of the road transport vehicles in use, but also the basic technical conditions to be complied with by the application of the road transport vehicles. This revision pays more attention to the development