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

GB 17578-2013

Replacing GB/T 17578-1998

**Requirements and test methods of strength for the
superstructure of bus**

客车上部结构强度要求及试验方法

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Foreword

Clauses 4.1 and 4.2 in this standard are mandatory. The rest are recommended.

This standard was drafted in accordance with the rules, which are given in GB/T 1.1- 2009.

This standard replaces GB/T 17578-1998 "Provisions of strength for the superstructure of bus".

Compared with GB/T 17578-1998, the main changes of this standard are as follows:

- CHANGE the standard attributes from recommended to mandatory;
- CHANGE the name of the standard, from "Provisions of strength for the superstructure of bus" to "Requirements and test methods of strength for the superstructure of bus";
- CHANGE the scope of the standard (Chapter 1 of the 1998 edition; Chapter 1 of this edition);
- ADD and MODIFY the terms and definitions (Chapter 3 of the 1998 edition; Chapter 3 of this edition);
- ADD the loading mass of the rollover test. The original test mass is the kerb mass of the whole vehicle, which is now changed to the unladen kerb mass or the total effective mass (5.1.1 of the 1998 edition; 4.3.1 of this edition);
- ADD the four equivalent test methods, including body section rollover test, body section quasi-static load test, quasi-static calculation based on test components, computer-simulated vehicle rollover test (see 4.4 and Appendix E ~ Appendix H) ;
- ADD the provisions for the test method of articulated buses (see 4.5);
- ADD the provisions for the direction of the rollover test (see 4.6);
- ADD the judgment principle on the same type (see Chapter 5);
- MODIFY the vehicle rollover test, as the basic test method (Chapter 5 of the 1998 edition; Appendix C of this edition);
- ADD that the rollover test bench shall have sufficient rigidity and sufficiently controllable rotational speed, to ensure the synchronization of the lifting axle (see C.1.1);
- ADD the error of 800 mm height difference, between the initial horizontal plane of the tilting platform and the impact surface (see C.1.2);

- ADD a description of the detailed dimensions of the wheel guards [see C.1.4a)];
- MODIFY the horizontal distance, between the center line of the flip axis and the side wall of the impact plane, from 0 mm ~ 200 mm to not more than 100 mm [5.2.2b) of the 1998 edition; C.1.3a) of this edition];
- ADD the description of the counterweight on the seat, which is equipped with restraint device [see C.2.1e)];
- ADD the provisions that the vehicle suspension system shall be locked, during the test [see C.2.2b)];
- ADD test instructions for articulated buses (see C.2.3);
- ADD the provisions for the location of high-speed cameras (see C.3.4);
- ADD the descriptions on the rollover test documentation (see C.4);
- ADD the technical documents, which are required for the type approval test (see Appendix D);
- ADD the measurement of the centroid of the vehicle (see Appendix I);
- ADD structural basic description about superstructure (see Appendix J).

This standard was compiled, using the redrafting method, with reference to the technical contents of the 01 edition of ECE R66 Uniform technical prescriptions concerning the approval of large passenger vehicles with regard to the strength of their superstructure, which was promulgated by the United Nations Economic Commission for Europe on February 22, 2006, as well as its amendments and errata sheets.

This standard provides a comparison list of the chapter number, between this standard and the ECE R66, in Appendix A. Appendix B provides list of technical differences with ECE R66 and their reasons, for reference.

For ease of use, this standard has also made the following editorial changes to ECE R66:

- a) CHANGE the word "this Regulation" into "this standard";
- b) ADD the foreword of Chinese standard.

This standard was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

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

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This standard replaces the standard previously issued as follows:

- GB/T 17578-1998.