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

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Replacing GB 27887-2011

Child restraint systems for power-driven vehicles

机动车儿童乘员用约束系统

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1 Scope

GB 27887-2024 is the Chinese national standard on child restraint systems for power-driven 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 29 September 2024 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 July 2025. Classification: ICS 43.040.60, 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 document defines the terms and definitions of child restraint systems for power-driven vehicles (hereinafter referred to as "child restraint systems", CRS); specifies general requirements, performance requirements, test reports, marking and instructional guidance documents; describes the corresponding test methods. This document applies to the following types of child occupant restraint systems suitable for installation in power-driven vehicles.

- a) Integral universal ISOFIX child restraint system (i-Size child restraint system);
- b) Integral ISOFIX child restraint system for specific vehicle models;
- c) Integral universal belted child restraint system;
- d) Integral seat belt fixed child restraint system for specific vehicle models;
- e) Non-integral universal child restraint system with backrest (i-Size booster seat);

- f) Non-integral child restraint system with back for specific vehicle (booster seat for specific vehicle models);
- g) Non-integral universal child restraint system without backrest (universal booster cushion);
- h) Non-integral child restraint system without backrest for specific vehicle models (booster cushion for specific vehicle models).

2 Normative references

The contents of the following documents constitute the essential provisions of this document through normative references in the text. Among them, for referenced documents with dates, only the version corresponding to that date applies to this document; for referenced documents without dates, the latest version (including all amendments) applies to this document.

GB/T 231.1 Metallic materials - Brinell hardness test - Part

3 Terms and definitions

The terms and definitions defined in GB/T 4780, GB 14166, GB 14167, as well as the following terms and definitions, apply to this document.

3.1 Child restraint system; CRS Child seat A device that reduces the damage to the wearer in a impact or sudden deceleration, by limiting the movement of the child's body, so that the child occupant can remain in a sitting or sleeping position.

3.2 Integral class A class of child restraint systems in which the child is restrained only by the components of the child restraint system and not directly by the vehicle's seat belts.

Note. The components of the child restraint system include child harness belts, impact protection devices, etc.

3.3 Non-integral class A class of child restraint systems that directly restrain children in the child restraint system through the vehicle's seat belts.

3.4 Rigid fixture for the child restraint system ISOFIX An internationally common system that connects the child restraint system to the vehicle through two lower anchorages on the vehicle, two corresponding rigid connecting devices on the child restraint system, a device that limits the flipping of the child restraint system.

3.5 Built-in child restraint system A child restraint system that is an integral part of the vehicle or vehicle seat and is fixed to the vehicle.

3.6 Universal child restraint systems A product type of child restraint system that is applicable to all i-Size seats or all universal seats.

4.2 Structure

4.2.1 The structure of the child restraint system shall meet the following requirements.

4.2.2 The following requirements shall be met when designing and installing child restraint systems.

4.2.3 Removable or movable parts designed for maintenance or adjustment shall only be removed or moved with the help of special tools. Any possibility of incorrect assembly or use of these parts shall be avoided. The assembly and disassembly process shall be detailed in the user manual of the child restraint system. Child harness belts shall be adjustable within their adjustment range without disassembly.

4.2.4 Special needs restraint systems may have additional restraint devices, which shall be designed to avoid incorrect assembly; their release method and operation mode shall be obvious to rescuers in an emergency.

4.2.5 Child restraint systems are allowed to cover any size range when designed.

4.2.6 Child restraint systems with inflatable parts shall be designed to ensure that the environment (pressure, temperature, humidity) in which they are used will not affect the performance requirements of this document.

4.2.7 During the test specified in Appendix D, the booster cushion shall not be completely pulled out of the three-point seat belt and the lower torso shall not be separated from the booster cushion.

4.3.2 General characteristics

4.3.2.1 General requirements The manufacturer shall declare the various usage modes of the child restraint system and the corresponding applicable height range. The child restraint system shall be adjusted so that its external dimensions meet the requirements of 4.3.2.3; the applicable height range shall be verified by measuring the internal dimensions according to the provisions of 4.3.2.2.

5.1.2 Energy absorption

5.1.3 Rollover test requirements The child restraint system shall be tested in accordance with the method specified in 6.1.2. During the entire test, the test dummy shall not fall out of the device; when the standard seat is in the rollover position, the displacement of the dummy's head from its original position in the direction perpendicular to the seat shall not exceed 300 mm. The measurement shall be carried out after the load is removed.

5.1.4 Temperature test requirements After the buckle, retractor, adjustment device, seat belt locking device are subjected to temperature test in accordance with the provisions of 6.2.7, the test personnel shall visually inspect and there shall be no signs that may impair the