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PEOPLE'S REPUBLIC OF CHINA**

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Motor vehicle spark arrester

机动车排气火花熄灭器

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Foreword

This document was drafted in accordance with the rules given in GB/T 1.1-2020 "Directives for standardization - Part

1.Rules for the structure and drafting of standardizing documents". This document replaces GB 13365-2005 "Spark arrester". Compared with GB 13365- 2005, in addition to structural adjustments and editorial changes, the main technical changes in this document are as follows:

- a) Appearance requirements have been changed (see
- 5.1 of this Edition;
- 4.7 of Edition 2005);

- b) Strength requirements have been added (see 5.2 of this Edition);
- c) Arresting performance requirements have been changed (see 5.3 of this Edition; 4.1 of Edition 2005);
- d) Power performance requirements when fitted with an arrester have been changed (see 5.4 of this Edition; 4.2 of Edition 2005);
- e) High-temperature resistance requirements have been added (see

1 Scope

GB 13365-2025 is the Chinese national standard on motor vehicle spark arrester, in the field of environment and health protection, safety. 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 1 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 August 2026. Classification: ICS 13.220.20, CCS C84. 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 motor vehicle spark arrester (hereinafter referred to as "arrester"). It specifies the classification and model compilation, technical requirements, inspection rules, packaging, transportation, storage, and use. It also describes the corresponding test methods. This document applies to the design, production, and testing of motor vehicle spark arrester. Spark arresters used in other equipment shall refer to this document for implementation.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

GB/T 3181-2008, Color Standard for Paint Film

GB/T 5530.1, Industrial wire screens and woven wire cloth -- Guide to the choice of aperture size and wire diameter combinations -- Part

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in GB/T 29261.3-

4.2 Model compilation The method for compiling the model of the arrester is as follows:

Example 1. For an arrester that has a diameter of 150 mm, an interface size of 100 mm, that is generally equipped, non-integral, non-liquid cooling, with a passive tag, its company code is DYG, and its product model is. HXQ150/100-CFFN-DYG. Example 2. For an arrester has a diameter of 120 mm, an interface size of 60 mm, that is temporarily equipped, non-integral, liquid cooling, with an active tag type, its company code is QLF, and its product model is. HXQ120/60-LFYY-QLF.

5.1 Appearance quality

5.1.1 The arrester surface should be flat and smooth. The weld should be uniform. Connectors should be securely connected. There should be no defects such as cracks, burn-throughs, or incomplete welds.

5.1.2 All exposed parts of the arrester should be passivated. There should be no risk of cuts.

5.1.3 The outer surface color of the arrester should be R 03 bright red, GY 03 military green or black as specified in GB/T 3181-2008.

5.1.4 The roundness of the arrester valve body should not exceed 5 mm.

5.1.5 The switch of the arrester should open and close flexibly. There should be no sticking or other phenomena. The switch should be equipped with a limit device.

5.1.6 The valve core should be made of stainless steel with a thickness of not less than 0.6 mm.

5.2 Strength requirements A pressure of 1000 N is applied to the arrester in the axial direction. The deformation of the length should not exceed 5% (excluding the switch). A force of 1000 N is applied perpendicular to the axial direction. The deformation of the diameter should not exceed 10%.

5.3 Arresting performance Carry out the arresting performance test according to 6.3. The activated carbon particles collected at the arrester outlet should not exceed 15% of the original value.

5.4 Engine performance after installation of arrester

5.4.1 After the engine is fitted and used with an arrester, the power decreasing ratio (40% of rated power) of the engine should not exceed 2%.

5.4.2 After the arrester is installed and used, the exhaust noise at the tail pipe outlet should

not exceed the exhaust noise when it is not installed.

5.4.3 After the arrester is installed and used, the exhaust temperature at the tail pipe outlet should not exceed the exhaust temperature when it is not installed.

5.5 Vibration resistance The arrester shall be subjected to vibration test in accordance with 6.5. During and after the vibration, the test specimen shall not show any structural damage, open welding, loosening, or other phenomena that may affect its use.

5.6 Drop resistance Non-integral arresters shall be subjected to the drop test in accordance with 6.6. After the test, the sample shall show no structural damage or permanent deformation that could endanger its safe use. After the test, the valve core shall open and close normally. The interface shall be able to be connected and used normally without correction.

5.7 Installation requirements

5.7.1 The connection between the generally equipped arrester and the exhaust system should be able to withstand a tensile force of 1000 N without falling off. When connected to the end of the exhaust tail pipe, the connection should be sealed and prevented from loosening.

5.7.2 Temporarily equipped arresters should be equipped with a connection device that

5.11.3 After passing the tests in 6.5,

6.6 and 6.9, the electronic tag should be able to be read and written. The read information should be consistent with the written information.

5.11.4 Passive tag information should include the manufacturer, product model, manufacturing date, production batch number, production serial number, etc. The coding rules should comply with the requirements of Annex A.

5.11.5 The information on active tags shall include the manufacturer, product model, manufacturing date, production batch number, production serial number, etc. The coding rules shall comply with the requirements of Annex A.

5.11.6 The electronic tag should be able to be read and written normally in an environment surrounded by metal.

5.11.7 The reading distance when reading electronic tag information should be greater than 0.2 m.

5.11.8 The content written into the electronic tag and the information interaction with the reader/writer shall comply with the requirements of the GB 18030 Chinese coded character set.

5.11.9 The encoding rules for the vehicle license plate data in the active tag host number