



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

GB/T 6809.12-2021

**Reciprocating internal combustion engines - Vocabulary of
components and systems - Part 12: Exhaust emission control
systems**

Issued on: April 30, 2021

Implemented on: November 1, 2021

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	1

Foreword

GB/T 6809 "Terms of Reciprocating Internal Combustion Engine Parts and Systems" is divided into the following parts.

- Part 1.Fixing parts and external cover;
- Part 2.Valve, camshaft transmission and driving mechanism;
- Part 3.Main moving parts;
- Part 4.Supercharging and intake and exhaust pipe system;
- Part 5.Cooling system;
- Part 6.Lubrication system;
- Part 7.Regulation system;
- Part 8.Starting system;
- Part 9.Monitoring system;
- Part 10.Ignition system;
- Part 11.Fuel system;
- Part 12.Emission Control System.

This part is Part 12 of GB/T 6809.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to ISO 7967-12:2014, Part 12 of Terminology for Reciprocating Internal Combustion Engine Parts and Systems.

Emission Control System.

This section has made the following editorial changes.

- The examples in the definitions of 3.1.6, 3.1.7, 3.1.10 and 3.2.8 have been changed to the form of note;

--- Modified the sequence number of the figure in 3.2.14 "Note 1", and adjusted the sequence number and arrangement sequence of Figure 3 and Figure 4;

---Added the reference to the figure in 3.2.17 "Notes";

---Added Chinese and English indexes.

This part was proposed by China Machinery Industry Federation.

This part is under the jurisdiction of the National Internal Combustion Engine Standardization Technical Committee (SAC/TC177).

Drafting organizations of this section. Shanghai Internal Combustion Engine Research Institute Co., Ltd., Anhui Ecolan Environmental Co., Ltd., Wuhu Tyco Automobile

Technology Co., Ltd., Ningbo Geely Luoyou Engine Parts Co., Ltd., Shanghai Automotive Group Co., Ltd. Commercial Vehicle Technology Center, Shanghai

Haidian University, Tianjin Internal Combustion Engine Research Institute (Tianjin Motorcycle Technology Center), Kunming University of Science and Technology.

Drafters of this section. Chen Yunqing, Liu Yi, Ji Weibin, Guo Hua, Yang Jiehai, Li Lianbao, Qiao Liangliang, Xie Yaping, Wu Xuling, Song Zhiliang,

Ding Qianlan, Jia Dewen, Cai Wei, Shen Hongjie, Li Yujie, Ju Yusheng.

Reciprocating internal combustion engine parts and system terms

Part 12.Emission Control System

1 Scope

This part of GB/T 6809 defines the terminology of emission control systems for reciprocating internal combustion engines.

ISO 2710-1 provides the classification of reciprocating internal combustion engines and defines the basic terms of this internal combustion engine and its operating characteristics.

This section is classified according to the following terms.

- a) Exhaust emissions of pollutants;
- b) Emission control systems and devices;
- c) Emission control system parameters.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 8190.1-2010 Emission measurement of reciprocating internal combustion engines
Part 1. Test bench measurement of gas and particulate emissions

(ISO 8178-1:2006, IDT)

GB/T 8190.9-2017 Emission measurement of reciprocating internal combustion engines
Part 9. Exhaust smoke measurement of compression ignition engines under transient conditions

Test cycle and test procedure for test bench measurement (ISO 8178-9:2012, IDT)

3.1 Exhaust emission pollutants

3.1.1

Exhaust emission

The discharge phenomenon of pollutants or similar pollutants contained in the exhaust gas of internal combustion engines.

3.1.2

Particulate matter; PM

Particulates

< General > Included in exhaust gas, particles mainly composed of soot and condensed hydrocarbons, sulfates and bound water.

Note. When used in measurement and operating procedures, "particulate matter" is more accurately defined as "dilute the exhaust with clean filtered air, so that the air measured immediately upstream of the main filter paper

When the body temperature is greater than 315K (42°C) and less than or equal to 325K (52°C), the substance collected on the specified filter medium", see

3.1 in GB/T 8190.1-2010.

3.1.3

Total suspended particulate; TSP

Total suspended particulate matter

The sum of particles (3.1.2) with a diameter of less than 100µm.