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## 重型柴油车污染物排放限值及测量方法 (中国第六阶段)

Limits and Measurement Methods for Emissions from  
Diesel Fuelled Heavy-Duty Vehicles (CHINA VI)

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# Limits and Measurement Methods for Emissions from Diesel Fuelled Heavy-Duty Vehicles (CHINA VI)

## 1 SCOPE

This Standard specifies the limits and test methods for emissions of gaseous and particulate pollutants from the CIEs and the vehicles installed with CIE, and the limits and measurement methods for emissions of gaseous pollutants from the NG/LPG fuelled PIEs and the vehicles installed with NG/ LPG fuelled PIE.

This Standard applies to type test, conformity of production (COP) check, supervisory inspection of newly produced vehicles and in-service conformity check for the compression ignition engines and gas fuelled positive ignition engines installed on Category M<sub>1</sub> vehicles with a GVW exceeding 3,500 kg and Categories M<sub>2</sub>, M<sub>3</sub>, N<sub>1</sub>, N<sub>2</sub> and N<sub>3</sub> vehicles, and for the above-mentioned vehicles.

The type test of a complete vehicle carried out in accordance with this standard can be extended to its variants and versions with a reference mass above 2,380 kg.

The motor vehicles of Category M<sub>1</sub>, M<sub>2</sub>, N<sub>1</sub> and N<sub>2</sub> equipped with CIE or gas fuelled PIE, if have already passed the type test according to GB 18352.6-2016, may be exempted from the type test under this standard.

## 2 NORMATIVE REFERENCES

The standard refers to the following normative documents or the provisions contained therein. For dated references, only the editions cited apply. For undated references, the latest editions of the normative document (including any amendments) apply.

GB/T 2624	Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full (IDT ISO 5176)
GB/T 3730.2	Road vehicle-Masses-Vocabulary and codes
GB/T 8190.1	Reciprocating internal combustion engines - Exhaust emission measurement -Part 1:Test-bed measurement of gaseous and particulate exhaust emissions
GB/T 15089	Classification of power-driven vehicles and trailers
GB/T 17692	Measurement methods of net power for automotive engines
GB 18047	Compressed natural gas as vehicle fuel
GB 18352.6-2016	Limits and measurement methods for emissions from light-duty vehicles (CHINA 6)
GB/T 19001	Quality management systems
GB/T 27840	Fuel consumption test methods for heavy-duty commercial vehicles
GB 30510	Fuel consumption limits for heavy-duty commercial vehicles
ISO 5725	Accuracy of measurement methods and results
ISO 7000	Graphical symbols for use on equipment - Index and synopsis
ISO 13400	Road vehicles - Diagnostic communication over Internet Protocol (DoIP)
ISO 15031	Road vehicles - Communication between vehicle and external equipment for emissions-related diagnostics
ISO 15031-3	Road vehicles - Communication between vehicle and external equipment for emissions-related diagnostics - Part 3: Diagnostic connector and related electrical circuits: Specification and use
ISO 15031-7	Road vehicles - Communication between vehicle and external equipment for emissions-related diagnostics - Part 7: Data link security

ISO 15765-4	Road vehicles - Diagnostic communication over Controller Area Network (DoCAN) - Part 4: Requirements for emissions-related systems
ISO 27145	Road vehicles - Implementation of World-Wide Harmonized On-Board Diagnostics (WWH-OBD) communication requirements
SAE J1708	Serial data communications between microcomputer systems in heavy-duty vehicle applications
SAE J1939	Recommended Practice for a Serial Control and Communications Vehicle Network
SAE J1939-13	Off-Board Diagnostic Connector
SAE J1939-73	Application Layer - Diagnostics
SAE J2186	E/E Data Link Security
ASTM E29-06b	Standard Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications
ASTM F1471-93	Standard Test Method for Air Cleaning Performance of a High-Efficiency Particulate Air- Filter System
EN 1822-1	High efficiency air filters (EPA, HEPA and ULPA) - Part 1: Classification, performance testing, marking

### 3 TERMS AND DEFINITIONS

For the purpose of this standard, the following terms and definitions apply.

#### 3.1

老化循环 aging cycle

“Aging cycle” means the vehicle or engine operation (speed, load, power) to be executed during the durability test.

#### 3.2

发动机（发动机系族）型式检验 engine (engine family) type test

“Engine (engine family) type test” means the type approval test, after the design of a type of engine (engine family) completes, carried out on a new product intended to be launched on the market to verify whether the product complies with the specifications of this standard.

#### 3.3

车辆型式检验 vehicle type test

“Vehicle type test” means the type approval test, after the design of a vehicle type completes, carried out on a trial-produced new product to verify whether the product complies with the specifications of this standard.

#### 3.4

辅助排放策略 auxiliary emission strategy (AES)

“Auxiliary emission strategy” means an emission control strategy that becomes active and replaces or modifies a base emission strategy for a specific purpose and in response to a specific set of ambient or operating conditions and only remains operational as long as those conditions exist.

#### 3.5

基本排放策略 base emission strategy (BES)

“Base Emission strategy” means an emission control strategy that is active throughout the speed and load operating range of the engine unless an AES is activated.



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