



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

GB 18285-2018

**Limits and measurement methods for emissions from gasoline
vehicles under two-speed idle conditions and short driving
mode conditions**

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1 Scope

This Standard specifies the limits and measurement methods for emissions from gasoline vehicles under two-speed idle conditions, steady-state loaded mode, transient loaded mode and simple transient loaded mode. Meanwhile, this Standard also specifies the methods and determination bases for the appearance inspection, OBD inspection and evaporative emission control system detection of gasoline vehicles.

This Standard is applicable to the inspection for new produced vehicle at end of production line, inspection for register vehicle and inspection for in-use vehicle. This Standard also applies to other vehicles equipped with ignition engines.

2 Normative References

The clauses of the following documents become clauses of this Standard through the references in this Standard. In terms of references without a specified date, the latest version is applicable to this Standard.

GB 5181-2001 Automotive Emission - Terms and Definitions

GB 14762-2008 Limits and Measurement Methods for Exhaust Pollutants from Gasoline Engines of Heavy-duty Vehicles (III, IV)

GB/T 15089-2001 Classification of Power-driven Vehicles and Trailers

GB 17691 Limits and Measurement Methods for Exhaust Pollutants from Compression Ignition and Gas Fueled Positive Ignition Engines of Vehicles

GB 17691-2018 Limits and Measurement Methods for Emissions from Diesel Fueled Heavy-duty Vehicles (China VI)

GB 17930 Gasoline for Motor Vehicles

GB 18047 Compressed Natural Gas as Vehicle Fuel

GB 18352 Limits and Measurement Methods for Emissions from Light-duty Vehicles

GB 19159 Automotive Liquefied Petroleum Gases

3 Terms and Definitions

The following terms and definitions are applicable to this Standard.

3.1 Light-duty Vehicle

Light-duty vehicle refers to vehicle of category M1, M2 and N1 with a maximum design total mass not exceeding 3,500 kg.

3.2 Vehicle of Category M1, M2 and N1

In accordance with the stipulations of GB/T 15089.

Category M1 refers to passenger vehicles with no more than nine seats, including the driver's seat.

Category M2 refers to passenger vehicles with more than nine seats, including the driver's seat, and with a maximum design total mass not exceeding 5,000 kg.

Category N1 refers to goods vehicles with a maximum design total mass not exceeding 3,500 kg.

3.3 Heavy-duty Vehicle

Heavy-duty vehicle refers to vehicle with a maximum total mass exceeding 3,500 kg.

3.4 In-use Vehicle

In-use vehicle refers to vehicle that has been registered and obtained a license plate.

3.5 Vehicle Emission Inspection

Vehicle emission inspection refers to various emission inspections carried out on vehicles in accordance with laws, regulations and standards, including inspection for new produced vehicle at end of production line, inspection for register vehicle, inspection for in-use vehicle and supervision test, etc.

3.6 Inspection for New Produced Vehicle at End of Production Line

Inspection for new produced vehicle at end of production line refers to the inspection of new produced vehicles before they exit the factory or enter the country. It is also applicable to environmental protection inspection carried out in the sales process.

4.2 The entry inspection of newly produced and imported vehicles shall be carried out in

accordance with the inspection items specified in Table 1, and shall also comply with the requirements of other standards and regulations.

5.1.1 Manufacturers shall ensure that all vehicle pollutant control devices at end of production

line are consistent with the contents of the accompanying list.

5.1.2 Manufacturers shall complete on-board diagnostic (OBD) inspection. The

exhaust

pollutant detection shall be subject to sampling inspection of at least 1.0% of the annual output of the model; the minimum size of the sampling inspection is 15 vehicles per year. For models with an annual output of less than 15 vehicles, each vehicle shall receive the inspection. The exhaust pollutant detection may choose any one of the methods in Appendix B, Appendix C and Appendix D (for vehicles, such as. full-time four-wheel drive and timely four-wheel drive that cannot manually switch the two-wheel drive mode, the two-speed idle method may be adopted) for emission detection.

5.1.3 The inspection procedures for new produced vehicle at end of production line are shown

in Figure 1. The inspection information shall be submitted in accordance with the stipulations of Appendix H.

5.1.4 The competent department of ecological environment may carry out all inspection

contents of appearance inspection, OBD inspection and exhaust pollutant inspection on the vehicle at end of production line. The appearance inspection shall focus on checking whether the vehicle pollution device is consistent with the content of the accompanying list.

5.1.5 For imported vehicles, the inspection for new produced vehicle at end of production line

shall be completed before entry, and the inspection information shall be submitted to the competent department of ecological environment.

5.2 The registration inspection items shall comply with the stipulations of Table 1; the

information shall be submitted in accordance with the stipulations of Appendix H. See the inspection procedures in Figure 2.

5.3 The inspection items of in-use vehicles shall comply with the stipulations of Table 1. Before

the inspection, an environmental protection online verification shall be carried out to check whether the vehicle has a record of environmental protection violations. In accordance with the stipulations of Appendix H, submit the information. See the inspection procedures in Figure 3.

6.1.1 Check whether the pollution control device of the vehicle is consistent with