

ICS 13.140
CCS Z64



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

GB 4569-2026

Replacing GB 4569-2005, GB 16169-2005

**Limits and measurement methods for noise emitted by
motorcycles (CHINA III)**

摩托车噪声限值及测量方法（中国第三阶段）

Issued on: February 12, 2026

Implemented on: January 1, 2029

**Issued by: the Ministry of Ecology and Environment of the People's
Republic of China**

Table of Contents

Foreword

1 Scope of application

2 Normative references

3 Terms and definitions

4 Type test

5 Type test extension

6 Conformity of production

7 Test for in-use vehicles

8 Implementation of standard

Annex A (Normative) Type test vehicle parameters

Annex B (Informative) Type test report

Annex C (Normative) Measurement method for road driving noise

Annex D (Normative) Measurement method for stationary noise

Annex E (Normative) Requirements for silencing systems fitted with fibrous sound-absorbing materials

Annex F (Normative) Production conformity assurance requirements

Foreword

This document was issued on 12 February 2026 by the the Ministry of Ecology and Environment of the People's Republic of China and takes effect on 1 January 2029.

It is a GB standard without the /T suffix: compliance is mandatory in China.

The document runs to 41 pages in translation. The identification, the dates, the table of contents and the clauses reproduced on this page are taken from the standard itself.

Limits and measurement methods for noise emitted by motorcycles

It replaces GB 4569-2005, GB 16169-2005, which is superseded.

1 Scope

GB 4569-2026 is China III for motorcycle noise. It sets the limits and the measurement methods for the drive-by noise and the stationary noise of motorcycles and mopeds, and it specifies the requirements and methods for type test, for conformity of production and for the inspection and judgement of in-use vehicles. It applies to motorcycles and mopeds of

categories L1 to L5, whether fitted with spark-ignition or compression-ignition engines, and to hybrid electric and electric machines. Six annexes carry the substance: the type test vehicle parameters, the type test report, the measurement method for drive-by noise, the measurement method for stationary noise, the requirements for silencing systems containing fibrous sound-absorbing material, and the production conformity assurance requirements. The document replaces both GB 4569-2005 and GB 16169-2005, bringing the two into one standard, and takes effect on 1 January 2029. For a manufacturer or an importer this is what a Chinese type approval is measured against.

This standard specifies the limit and measurement method for road driving noise and stationary noise emitted motorcycles and mopeds.

This standard specifies the requirements and methods for type test of motorcycles and mopeds, production conformity as well as the inspection and judgment methods for in-use vehicles.

This standard applies to motorcycles and mopeds, including those fitted with spark-ignition engines or compression-ignition engines, hybrid electric motorcycles and hybrid electric mopeds, and electric motorcycles and electric mopeds.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the normative document (including any amendments) applies. For other documents that are abolished, revised or revised by new documents, the new ones shall apply to this standard.

GB/T 3785.1 Electroacoustics - Sound level meters - Part 1 : Specifications

GB/T 5378 Methods of road test for motorcycles and mopeds

GB/T 6003.1 Test sieves - Technical requirements and testing - Part 1: Test sieves of metal wire cloth

GB/T 8170 Rules of rounding off for numerical values & expression and judgment of limiting values

GB/T 15173 Electroacoustics - Sound calibrators

GB/T 18385 Battery electric vehicles - Power performance - Test method

GB/T 20076 Measurement methods of maximum torque and maximum net power of engines for motorcycles and mopeds

GB/T 22157 Acoustics - Specification of test tracks for measuring noise emitted by road vehicles and their tyres

HJ 1350 Technical specification for vehicle environmental information disclosure

QC/T 792 Motors and controllers for electric motorcycles and electric mopeds

3 Terms and definitions

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

3.1

vehicle of category L1, L2, L3, L4 and L5

Category L1: moped with two wheels mounted on the longitudinal center plane

Category L2: moped with three wheels, one of which is located on the longitudinal center plane, and the other two wheels symmetrically arranged with respect to the longitudinal center plane

Category L3: motorcycle with two wheels located on the longitudinal center plane of the vehicle

Category L4: motorcycle fitted with a sidecar on the right side of the two-wheeled motorcycle

Category L5: motorcycle with three wheels, one of which is located on the longitudinal center plane, and the other two wheels symmetrically arranged with respect to the longitudinal center plane

3.2

electric motorcycle

motorcycle driven by electricity, including electric motorcycles with two wheels and electric motorcycles with three wheels

3.3

electric moped

moped driven by electricity, including electric mopeds with two wheels and those with three wheels

3.4

hybrid electric motorcycle and moped

vehicle that is able to obtain power from at least the following two types of on-board energy storage devices:

- consumable fuel;
- rechargeable energy storage device.

3.5

type test

test conducted to verify whether a newly trial-produced model of a motorcycle or moped can meet the technical requirements of this standard, after the design of that particular model is completed

3.6

background noise

noise (including wind noise) from the surrounding environment in the absence of noise from the test vehicle

3.7

noise reduction system

complete set of components used to control noise radiated outward from the engine and the intake and exhaust systems of a motorcycle or moped

3.8

noise reduction system component

individual independent components that constitute the noise reduction system, including but not limited to: exhaust manifold, exhaust pipe, expansion chamber, muffler, etc. If the intake system of the power unit must be equipped with an air filter and an intake silencer, then the air filter and the intake silencer are considered a component of the noise reduction system.

3.9

noise reduction system types

Systems that are identical in the following aspects may be considered the same type:

- the components are from the same manufacturer;
- the material and internal structure of the components are the same;
- the working principle is the same;
- the installation method is the same.

3.10

test mass (m_{test})

kerb mass of the vehicle plus 75 kg

Note: For the purposes of this standard, the test mass of electric three-wheeled motorcycles and electric three-wheeled mopeds includes the mass of the power storage