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

GB/T 3565.4-2022

Safety requirements for bicycles - Part 4: Braking test methods

自行车安全要求 第4部分：车闸试验方法

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Foreword

This document was issued on 30 December 2022 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 October 2023.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 43.150, Chinese classification Y14.

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules for Standardization Documents" drafting.

This document is part 4 of GB (T) 3565 "Safety Requirements for Bicycles". And GB 3565.2 "Bicycle Safety Requirements Part 2

Subdivision. Requirements for City and Touring Bicycles, Youth Bicycles, Mountain Bicycles and Competition Bicycles" is the supporting standard. GB (T)3565

The following 9 parts have been released.

--- Part 1. Terms and definitions;

--- Part 2. Requirements for city and touring bicycles, youth bicycles, mountain bikes and racing bicycles;

--- Part 3. General test methods;

- Part 4.Brake test method;
- Part 5.Test methods for handlebars;
- Part 6.Test methods for frame and front fork;
- Part 7.Test methods for wheels and rims;
- Part 8.Test methods for pedals and drive systems;
- Part 9.Test methods for saddles and saddle tubes.

This document is modified to adopt ISO 4210-4.2014 "Safety requirements for bicycles and two-wheeled bicycles - Part 4.Test methods for brakes".

The technical differences between this document and ISO 4210-4.2014 and their reasons are as follows.

- Replaced ISO 4210-1 with the normatively quoted GB/T 3565.1 to adapt to my country's technical conditions and increase operability (see

Clause 3, Clause 3 of ISO 4210-4.2014);

- In the "Measurement method of C-type brake handle", the inspection method of "brake handle with position adjustment" is added, which is consistent with GB 3565.2;

Changed the "Installation method of the gauge in C-type brake handle and handle bar in Figure 4" to correct the error in the original figure (see 4.1.2, Figure 4, ISO 4210-4.

Figure 4 of.2014);

- In the "dry state test" of the "testing machine test method", change the operating force from "completely applied within 1s" to "0.5s after the brake is activated"

"Complete application within" to facilitate accurate measurement of braking performance; delete "time to measure each operating force increment" and "time to measure braking force

Time", which is convenient for test measurement and operability [see 4.6.5.7c)1), ISO 4210-4.2014's 4.6.5.7c)1)];

- In the "brake heat resistance test", the requirement that "the brake system can be adjusted" is added to make the braking performance comparison under the same conditions

Compared with; increase the coefficient "c" in the braking energy calculation formula (5) to adapt to the various qualities of the bicycle recommended (see 4.7).

The following editorial changes have been made to this document.

- Change the name of the standard to "Bicycle Safety Requirements Part 4.Brake Test

Method" in order to be compatible with the existing standardized documents coordination.

Please note that some contents of this document may refer to patents. The issuing agency of this document assumes no responsibility for identifying patents.

This document is proposed by China National Light Industry Council.

This document is under the jurisdiction of the National Bicycle Standardization Technical Committee (SAC/TC155).

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Introduction

GB (T) 3565 "Safety Requirements for Bicycles" was drafted according to the safety requirements of bicycle products.

To produce bicycles that are as safe as possible. GB (T) 3565 "Bicycle Safety Requirements" consists of 9 parts.

--- Part 1. Terms and definitions. The purpose is to unify the terminology used in each part of the standard.

--- Part 2. Requirements for city and touring bicycles, youth bicycles, mountain bikes and racing bicycles. purpose is

Classify the safety requirements of Category 4 bicycles into mandatory national standards for easy enforcement.

--- Part 3.General test methods. The purpose is to centralize and unify the general test methods for bicycle safety requirements and facilitate operation.

--- Part 4.Brake test method. The purpose is to carry out professional tests on the brake requirements in the bicycle safety requirements, and provide a basis for the brake test

Opportunities for method improvement.

--- Part 5.Test methods for handlebars. The purpose is to carry out professional tests on the handlebar requirements in the bicycle safety requirements, and to provide a basis for the handlebar test

Opportunities for method improvement.

--- Part 6.Test methods for frame and fork. The purpose is to conduct a professional review of the requirements for frame and front fork in bicycle safety requirements.

Test and provide opportunities for improved test methods for frames and forks.

--- Part 7.Test methods for wheels and rims. The purpose is to conduct a professional review of the requirements for wheels and rims in bicycle safety requirements

Test and provide opportunities for improvement of test methods for wheels and rims.

--- Part 8.Test methods for pedals and drive systems. The purpose is to meet the requirements for pedals and drive systems in bicycle safety requirements

Conduct specialized tests and provide opportunities for improved test methods for pedal and drive systems.

--- Part 9.Test methods for saddles and saddle tubes. The purpose is to conduct a professional review of the requirements for saddles and saddle tubes in bicycle safety requirements

Test, and provide opportunities for the improvement of test methods for saddles and saddle tubes.

GB 3565.2 is a mandatory national standard, and 7 test method standards (GB/T 3565.3~GB/T 3565.9) are recommended national standards

Standard, used in conjunction with GB 3565.2.These 7 test method standards are designed to ensure the strength and reliability of individual components and bicycles

Meet the requirements, and require consideration of safety aspects from the design stage.

The scope of GB (T) 3565 is limited to product safety considerations. If bicycles are used on public roads, the "Chinese People's

The Road Traffic Safety Law of the Republic and relevant management regulations.

To improve repeatability and reproducibility, and to take into account suitability, size and