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**Safety requirements for bicycles - Part 6: Frame and fork test
methods**

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foreword

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 6 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 4210-6:2015 "Safety requirements for bicycles and two-wheeled bicycles - Part 6. Frame and front fork test methods

Law".

Compared with ISO 4210-6.2015, this document has made the following structural adjustments.

---Chapter 5 corresponds to Chapter 5 of ISO 4210-6.2015, of which 5.2.1 and 5.2.2 correspond to 5.2 and 5.7 of ISO 4210-6.2015;

---Deleted the title of C.1 in ISO 4210-6.2015, C.1 corresponds to C.1.1 and C.2 of ISO 4210-6.2015

C.1.2 of ISO 4210-6.2015.

The technical differences between this document and ISO 4210-6.2015 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;

--- In the schematic diagram of "Figure 3 Pedal Force Fatigue Test of Frame", the views of "direction A" and "BB" are added, supplementing ISO 4210-3.

2014 missing (see Figure 3);

--- In the "overview" of the horizontal force fatigue test of the frame, the content of the preload stroke of the shock-absorbing fork and the shock-absorbing frame is added to reflect the frame

In the horizontal fatigue test, the design concept of the preload travel method for the rear shock absorber front fork and shock absorber frame (see 4.4.1);

--- In the "overview" of the vertical force fatigue test of the frame, the shock-absorbing front fork is "locked in the

Length while on board" changed to "Lock it at a position equivalent to 25% of maximum travel"; increased rear shock preload travel

to reflect the design concept of the preload travel for shock-absorbing front forks and frame shock absorbers (see 4.5.1, ISO 4210-6.2015

4.5.1);

--- In the "test method" of the frame vertical force fatigue test, change the test cycle "50000 times" to "100000 times" to be the same as the other

The test cycle of other fatigue tests is harmonized; the description of "h3" is added in Figure 5 to make up for the omission of ISO 4210-6.2015

(See 4.5.2, Figure 5, 4.5.2 of ISO 4210-6.2015);

---In the "Frame Test Method", the requirements of "Combined Vibration Test of Frame and Front Fork" have been added to apply to special models, such as folding bicycles

Driving, it has a better verification effect of vehicle strength (see 4.6);

--- In the "front fork mounting fixture", the requirements for the vertical bar fixture have been added to prevent the front fork from rotating during the test (see Appendix B).

The following editorial changes have been made to this document.

--- Change the name of the standard to "Bicycle Safety Requirements Part 6. Test Methods for Frame and Front Fork" in order to be compatible with the existing standardized documents

file 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.

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 competition 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.