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

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General technical requirements for bicycles

自行车通用技术要求

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4 General Rules

4.1 A fully assembled bicycle The safety of a fully assembled bicycle should meet the requirements of GB 3565.2, and its assembly should meet the requirements of GB/T 3566;

each component It should meet the requirements of the relevant national and industry standards.

4.2 Bicycle Structural Design Parameters

4.2.1 Bicycles are designed according to different uses.

4.2.2 Bicycle design should conform to ergonomics, with sufficient clearance between moving and stationary parts, and the riding and handling should be safe, comfortable, and convenient. Its main... For design parameters, please refer to A.1 in Appendix A.

4.2.3 The width of a bicycle handlebar should not exceed 1000mm. The handlebar width should be designed according to the different uses of the bicycle. The parameter values can be found in A.2.

4.2.4 The width of bicycle tires should be designed according to the different uses of bicycles. The design parameter values can be referred to A.3.

4.2.5 When bicycle products leave the factory, the manufacturer shall provide technical parameters consistent with the product specifications. Specific items can be found in Appendix B.

4.3 Reflector The reference axes of the mirrors of the front and rear reflectors mounted on the bicycle should be aligned with the front and rear of the bicycle, respectively. The vertical and horizontal installation angle error should not exceed 5°.

4.4 Horn device The bell wrench or buzzer button mounted on the bicycle should be in a location easily accessible to the rider.

4.5 Kettle Holder A water bottle cage installed on a bicycle should allow for easy access to the water bottle without it falling off while the bicycle is being ridden.

4.6 Vehicle air pump The bicycle pump holder should allow for easy access to and from the pump without interfering with riding the bicycle. It fell.

4.7 Quick-release device Quick-release devices installed on bicycles should have a limit structure or marking at the locking position, and the locking mechanism should be clearly indicated in the instruction manual. Force value.

4.8 Bicycle Construction A fully assembled bicycle should meet the following requirements.

- a) The central shaft assembly has appropriate tension and rotates flexibly.
- b) The saddle tube is locked with clamping bolts, and when the bolts are loosened, the saddle tube can move up and down easily.
- c) The transmission system must not come into contact with other parts when rotating; its clearances must meet the following requirements. 1) Urban and touring bicycles, youth bicycles, and mountain bikes must be at least 6mm thick; 2) The thickness of the racing

bicycle should not be less than 4mm.

5.1 Braking System

5.1.1 Brake operating performance When tested according to the method described in 6.1.1, after applying a gripping force to the brake lever, the brake pads should be able to touch the wheel rim, and after releasing the brake lever, the brake pads should... It should be able to detach from the rim immediately; during the test, the brake control cable should not interfere with the stop bolt, the movement should be smooth, and there should be no friction with the fixed object. The gap between the clamp-type gate arm and the adjusting screw should be greater than 10mm. The vertical adjustment range of the gate skin should be greater than 2mm.

5.1.2 Braking fatigue After testing according to the method described in 6.1.2, there should be no contact between the brake lever and the handlebar grip; the hydraulic brake system should have no oil leakage; the brakes should function properly. The braking performance should not be less than 60% of the braking performance at the maximum operating force recorded before the braking fatigue test.

5.2 Drive System

5.2.1 Drive system impact After testing according to the method described in 6.2.1, the drive system should not lose its function, any component should not break, and the drive belt should not have any broken teeth.

5.2.2 Foot pedal installation reliability After testing according to the method described in 6.2.2, the disengagement torque of the pedal shafts of the left and right pedals should not be less than 25 N·m.

5.3.1 Reflecting Device

5.3.1.1 Front Reflector After testing according to the method described in 6.3.1.1, the bicycle front reflector mirror or mirror frame should not touch the ground.

5.3.1.2 Rear Reflector After testing according to the method described in 6.3.1.2, the bicycle rear reflector mirror or mirror frame should not touch the ground; for components susceptible to external forces... When force is applied to the rear reflector, the deviation of its mirror reference axis should be less than 15°; after the force is released, the deviation of its mirror reference axis should be less than 5°, and its various... The part should be free from damage and other obvious defects.

5.3.1.3 Foot pedal reflector The pedal reflector should be securely embedded in the pedal body or reflector frame and subjected to an impact test as described in 6.3.1.3. The pedal reflector should not detach.

5.3.2 Lighting devices

5.3.2.1 For bicycles equipped with low beam headlights, after testing according to the method described in 6.3.2, the leading edge of the light spot illuminating the horizontal road surface... The vertical distance between the centers of the front wheels should not exceed 8m.

5.3.2.2 For bicycles equipped with high beams, after testing according to the method described in 6.3.2, the leading edge of the light spot illuminating the horizontal road surface... The vertical distance between the centers of the front wheels should not exceed 16m.

5.4.1 Clay Tablets

5.4.1.1 The center line of the mounting holes for mudguards (mudguard tabs) on the bicycle front fork and frame should be located on the center plane of the frame.

5.4.1.2 The gap between the front and rear mudguards and the front and rear wheels of the bicycle shall be measured at three points, and the difference between the measured values shall be less than 4 mm.

5.4.1.3 The rear mudguard installed on the bicycle should not be noticeably twisted.

5.4.2 Luggage rack When a luggage rack is installed on a bicycle, it shall be tested according to the method described in 6.4.2. The luggage rack platform shall be tilted horizontally at 0° to 4° towards the riser.

5.4.3 Bracket

5.4.3.1 When a bracket is mounted on a bicycle, after supporting the bicycle, the support rod of a single bracket should extend forward within the range of 10mm to 25mm. Inside, the support rods of the double brackets should be tilted forward at 3°~7°.

5.4.3.2 For single-bracket installations on bicycles, the rear single-bracket, when in place, should tilt the bicycle towards the bracket at an angle of 8°~12°. (Middle single-bracket...) After being propped up, the bicycle should tilt at an angle of 6° to 11° towards the support.

5.4.3.3 When the double-stand parking bracket installed on the bicycle is raised, the distance between the front or rear tire of the bicycle and the ground should be greater than 30mm.

5.5.1 Overall Vehicle Reliability

5.5.1.1 Vehicle tipping over After testing according to the method described in 6.5.1.1, the bicycle's lights and reflectors should be undamaged and able to be ridden normally.

5.5.1.2 Vehicle Steering Rigidity After testing according to the method described in 6.5.1.2,