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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB 30005-2013

Safety requirements of unicycle

独轮车安全要求

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Foreword

Chapter 5 of this standard are mandatory, the rest are recommended. This standard was drafted in accordance with the rules given in GB 1.1-2009. The standard proposed by China National Light Industry Council. This standard by the National Toy Standardization Technical Committee (SAC/TC253) centralized. This standard was drafted. Yao carriage industry (China) Co., Ltd., Jiangsu Inspection and Quarantine Bicycle Testing Center, Kunshan Innovation and Technology Detector Co., Ltd, National Bicycle Quality Supervision and Inspection Center, Tianjin Eastwell Technology Limited. The main drafters. Zhang Xuefeng, Qian Lie Hui, Li Bangxin, Taoze Cheng, Zhang Lin, Li Yonglin. Wheelbarrow safety requirements

1 Scope

GB 30005-2013 is the Chinese national standard on safety requirements of unicycle, in the field of domestic and commercial equipment, entertainment, sport. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 10 October 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 June 2015. Classification: ICS 97.200.01, CCS Y14. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the

issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies the safety requirements wheelbarrow equipped with single pneumatic wheels and saddle, crank the wheel direct drive and single use test Test methods. This standard applies to directly drive a crank wheel wheelbarrow single use, users over the age of 6 years. This standard does not apply to road riding, and fitted with a chain drive and special-purpose athletic wheelbarrow.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document. GB 6675 Toy Safety

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Unicycle unicycle Equipped with single pneumatic wheels and saddle, crank the wheel direct drive single riding vehicles. Category

4 Wheelbarrow wheel diameter divided by small, medium and large (see Table 1). Table 1 wheelbarrow Categories Type wheel diameter For ages Small 406mm the following six years to 9 years Medium 457mm ~ 510mm 10 ~ 14 years old Large 560mm above 14 years of age

5 Technical requirements

5.1 Properties of Materials Chemistry Small wheelbarrow accessible surface coatings as well as elements (antimony, arsenic, barium, chromium, cadmium, lead, mercury and selenium) may be the most special saddle leather migration Great limit requirement shall comply with the requirements of GB 6675 migration of specific elements.

5.2 sharp edges Press 6.3 (sharp edge) test method, wheelbarrow car should not have any sharp edges accessible.

5.3 protrusion After assembly, the length (see Figure L 1) is greater than 8mm rigid protrusion exposed, its tail end should be rounded, rounding radius R shall not be less To 6.3mm. Such large end projection size A should be greater than 12.7mm, the small end of the size of B should be not less than 3.2mm, screw exposed Projection should be limited to less than the screw after tightening the nut with a large diameter sizes. NOTE. When L dimension greater than 8mm should be in line with the requirements of these dimensions shown. The minimum size of the example of Figure 1 protrusion Saddle locking device from the inside end to the outermost end should not exceed 24mm, to avoid touching the inside

of the rider thighs.

5.4.1 fork positioning device Located within the axle fork for fork notch or other tools should be targeting. When the axle or axle block close to the top of the slot , The wheels should be located in the center of the fork. Lateral static load strength

5.4.2 forks The test shaft mounted bearing frame and fork by the test method specified in 6.4, the test load of 500N is applied to the shaft, after 30s, Shed load, the load point of permanent deformation should be less than 3mm.

5.5 Wheel

5.5.1 Accuracy wheel Accuracy refers to the rotation axle runout tolerance. Runout tolerance refers to the wheel fully assembled and adjusted in the future, in the absence of axial movement Revolution of the case, the maximum allowable variation range of the position of the rim (i.e. indicator maximum stroke). Measuring wheel diameter, the axial runout when (concentricity), should be installed on the tires, the tire according to the standard casting maximum inflation pressure sufficient gas. Figure 2 test, radial runout tolerance of the wheel (in the direction perpendicular to the axis) circular runout measured should be less than 1.5mm. The wheels of the End Circular runout tolerance (in a direction parallel to the axis) circular runout measured should be less than 1.5mm.

2 Turn the accuracy of the wheel of FIG.

5.5.2 gap After loading calibration wheel member, a gap which the outer tire and the fork between the inside should not be less than 3mm.

5.5.3 Symmetry After loading calibration wheel parts, the inside of the fork with the left and right side of the rim gap between the difference should be less than 3mm.

5.5.4 rotation flexibility Rear wheel rotating part may not have obvious loose, rotation should be flexible, according to Figure 3 test, fixed wheel, lifted the saddle and saddle tube, the fork upright Pipe from vertical tilted forward or backward 5 ° fork should naturally fall. Figure 3 wheel rotation flexibility test

5.5.5 tire inflation pressure Manufacturer's recommended maximum inflation pressure shall be marked on the side of the cast tire, so tire mounted on the rear wheels is easy to be seen. NOTE. The tire manufacturer specified minimum pneumatic tire pressure label on the side of the cast.

5.5.6 sex with tires and rims Tire, tube and liner should match with the rim design phase. 110% of the tire inflated to the maximum inflation pressure after 5min later, Tire should remain intact inclusion in the rim. Wheel placed 48h, the phenomenon may not appear flat tire.

5.5.7 Static load wheel Wheel assembled by the method specified in 6.5, shall not break any parts of the wheel, the permanent deformation on the rim of the point of application

should not exceed 1.5mm.

5.5.8 wheel with strength Wheel assembled by the method specified in 6.6, 30s after mating between the tire and the rim should remain intact, the body of the components may not appear abnormal.

5.5.9 synthetic resin integrally molded wheels

5.5.9.1 temperature resistance In nominal inflated tires filled at a temperature of 15 °C ~ 20 °C placed 30min, then, the temperature was applied to 30 °C ± 5 °C, Place 4h, according to FIG. 4 warmed variation measuring rim width front and rear wheels, the difference should be less than 2mm. Figure 4 measured width

5.5.9.2 synthetic resin integrally molded wheel impact strength Wheel after filling the nominal inflation pressure, press the test method specified in 6.7, shall appear ministries have cracks, breakage or significant deformation.

5.5.9.3 rigid synthetic resin integrally molded wheels Figure 5 test, a synthetic resin integrally molded wheel rim spokes two intermediate load of 500N is applied to maintain 1min, bend at the point of load Song should be less than 30mm.

5 synthetic resin integrally wheel stiffness test

5.6 Saddles and saddle tube

5.6.1 General Saddle clip relative wheelbarrow forward direction, should be located in the rear of the saddle may not have obvious tilt the saddle clamp at both ends can not be on both sides of the saddle Outstanding; saddle after saddle tube is fixed folders, etc., should be firmly not loose, but after releasing the clamping device can easily adjust the saddle height.

5.6.2 Size limit Any part of the saddle, saddle holder saddle or other accessories, from the intersection of the surface and the amount of the saddle seat tube axis from the surface should not be higher than the saddle 125mm.

5.6.3 saddle tube insertion mark There is a permanent mark on the saddle inner tube, it clearly indicates the saddle frame tube into minimal depth, its length should not be less than the outer diameter of the seat tube length. For circular cross-section of the seat tube, the amount of the tag from the bottom of the tube from the saddle (ie seat tube diameter of the whole) should not be less than the diameter of the seat tube two Times height. For non-circular cross-section of the seat tube, the marker Lian tube bottom (ie, the seat tube of the whole cross-section) shall not be less than 40mm.

5.6.4 saddle adjustment clamping device When you press the test method specified in 6.8, saddle clamping device for adjusting the seat tube should not rotate in any direction, the seat tube for fork stand Nor should the tube is rotated.