

ICS 97.200.40
CCS Y 57



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

GB 28709-2012

Garden patrol minibus -- Seat belts and seat belt anchorages

非公路旅游观光车 座椅安全带及其固定器

(English Translation)

Issued on: September 3, 2012

Implemented on: July 1, 2013

Issued by: Standardization Administration of China

Table of Contents

Foreword
1 Scope
2 Normative references
3 Terms and Definitions
4 Requirements
4.1 Ribbon
4.2 Buckle
4.3 Holder
5 Test methods
5.2 Elastic webbing elongation test
5.3 Metal corrosion test element
5.4 Test seat belt buckle open
5.6 Prior to the tensile test

Foreword

Chapter 4 of this standard is mandatory, the rest are recommended.

This standard was drafted in accordance with rules GB/T 1.1-2009 given.

This standard is proposed and managed by the National cableway and rides Standardization Technical Committee (SAC/TC250).

Drafted by. National Construction Machinery Quality Supervision and Inspection Center, Zhejiang Luyuan Electric Vehicle Co., Ltd., Shenzhen Maxi Er electric cars Ltd., Suzhou benefits of high electric vehicles Manufacturing Co., Ltd., Shanxi Yongji battery depot.

1 Scope

This standard specifies the terms and definitions used in adult occupant and the seat belt anchor, the requirements and test methods. This standard applies to Off-road vehicle tourism adult occupant seat belt and holder.

2 Normative references

The following documents for the application of this document is essential. For dated references, only applies to the version dated paper Pieces. For undated references, the

latest edition (including any amendments) applies to this document.

GB/T 9798-1997 Metallic coatings electrodeposited layer of nickel GB/T 10125-1997 artificial atmosphere corrosion test Salt spray test ISO 24135-1:2006 Industrial vehicle driver restraint system technical requirements and test methods - Part 1. the lap belt (Industrial trucks-Specifications and test methods for operator restraint systems-Part 1. Lap-type seatbelts)

3 Terms and Definitions

The following terms and definitions apply to this document.

Seat belt seatbelt assembly to protect adult occupant safety is provided in parts of the ride flexible lockable ribbon.

Holder anchorages

The force acting on the safety belt is transmitted to the device on the vehicle structural member.

Webbing strap

Adult and for restraining the occupant's body is subjected to the flexible force transmitting member belt anchor point.

The elastic elongation when the percentage of the webbing by external force (tensile force) acts, the length of the webbing elongated original length.

The seat belt device the seat belt device of a seat belt anchor and the locking member and the like on the composition.

4.1 Ribbon

4.1.1

webbing length not less than 10 times the width of a sample ribbon, when subjected to the tensile force 2250N, the elastic elongation of the webbing can not be large 20%, the width of the ribbon is not less than 46mm; 9000N when subjected to tension the webbing is not broken.

4.1.2

webbing should have sufficient tensile strength. 4500N tension under the action, not the webbing permanent deformation.

4.1.3

webbing trimmed edges should prevent loose during use.

4.2 Buckle

4.2.1

locking buckle should be easy to use and, when in the connected state, the buckle unstressed, locked state should be maintained.

4.2.2

The buckle should be opened by pressing a button or a similar device, the opening device shall be prominently and easy to operate; buckle fastening state Under it should not be automatically disengaged.

4.2.3

When used in a belt front outboard seating positions, the buckle should be in a certain direction by the wearer with a simple single-handed operation turn on.

4.2.4

acts when the seat belt (670 ± 45) N of force to unlock the force (F) should buckle.
 $10\text{N} \leq F \leq 60\text{N}$.

4.2.5

After a predetermined 5.5,5.6 test, the buckle should not be damaged, loose, open automatically and permanent deformation.

4.3 Holder

4.3.1

The seat belt should be fixed on the holder on both sides of the rear seat (the hatched region shown in FIG. 1), with the seat belt should be able to Move together chairs. Forms other structures of the fixture, its intensity should be greater than the present standard.

4.3.2

holder should be easy to install and replace the seat belt.

4.3.3

The test prescribed 5.5,5.6, the holder without permanent deformation, breakage and loose connections.

Metallic elements 4.4 4.4.1 metal element on the seat belt apparatus should be resistant to corrosion, salt spray corrosion test for 24h, corrosion defect area shall not exceed 10%, the method of determination, see GB/T 9798-1997 Appendix C.4.

4.4.2 metal element on the seat belt apparatus can not have sharp edges and burrs.

5 Test methods

Ribbon width and 5.1 Breaking test Two samples taken webbing length not less than 10 times the width of the webbing, and a sample was treated in Appendix A, a sample wherein Test after low-temperature treatment; another sample has high temperature treatment and after water immersion test. One end fixed to the test, is not applied to the other end of the small 2250N in tension, while measuring the width of the webbing; 9000N pulling force continues to increase, maintaining 10s.

5.2 Elastic webbing elongation test

Taken webbing length not less than 10 times the width of the web samples, one end is fixed, the tension of not less than 2250N is applied to the other end, and measurement Calculating the elastic webbing elongation.

5.3 Metal corrosion test element

5.3.1

Sample Metal corrosion test elements should meet the requirements GB/T 10125-1997 in Chapter 6, and no less than two, placed in the salt spray test chamber, salt spray test conducted 24h. After the test, the treated sample area measurement appearance and corrosion defects.

5.3.2

Corrosion test solution should be consistent with GB/T 10125-1997 in Chapter 3.

5.3.3

corrosion test shall comply with GB/T 10125-1997 in Chapter 4 with a salt spray chamber.

5.4 Test seat belt buckle open

Applying a belt (670 ± 45) N of tension in the safety test and the value of the recording power open the buckle.

Lateral tensile test was 5.5 as shown, the horizontal lateral direction of the seat, by a block shape (see Appendix B) 1 4500N tension is applied, the force is not time Less than 10s.

5.6 Prior to the tensile test

3, the horizontal plane in front of the seat into a front upward direction of $60^\circ \pm 15^\circ$, by a body block (see Appendix B) is applied 4500N tensile force, force time is not less than 10s, the SIP force should a predetermined point in FIG. 1, SIP position as shown in FIG.

Description.