

ICS 11.180
CCS Y 14



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

GB/T 18029.19-2014

**Wheelchairs -- Part 19: Wheeled mobility devices for use as
seats in motor vehicles**

轮椅车 第19部分：可作机动车座位的轮式移动装置
(English Translation)

Issued on: December 31, 2014

Implemented on: July 1, 2015

Issued by: Standardization Administration of China

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Foreword

GB/T 18029 "wheelchair" or has plans to release the following sections.

--- Part 1. Determination of static stability;

--- Part 2. Determination of dynamic stability of electric wheelchairs;

--- Part 3. Determination of the brake;

--- Part 4. Determination of electric wheelchairs and electric scooters theory energy consumption;

- Part 5. Dimensions, mass and turning space, measured;
- Electric wheelchairs maximum speed, acceleration and deceleration measured;. --- Part 6
- Part 7. Measurement of seating and wheel sizes;
- Part 8. static strength, impact strength and fatigue strength requirements and test methods;
- Part 9. electric wheelchairs climatic test methods;
- Part 10. Determination of electric wheelchair obstacle capacity;
- Part 11. Test dummies;
- Part 13. Determination of the test surface coefficient of friction;
- Part 14. electric wheelchairs and electric scooters and power control system requirements and test methods;
- Part 15. release of information, documents and requirements issued identification;
- Part 16. Block (by) pad flame retardancy requirements and test methods;
- Part 19. Wheeled mobile device can be used for vehicle seats;
- Part 21. electric wheelchair, electric scooter battery charger and electromagnetic compatibility requirements and test methods;
- Part 22. Adjustment Program;
- Part 23. Requirements and test methods for stair climbing device caregiver operations;
- Part 24. Requirements and test methods occupant operated stair climbing apparatus;
- Part 26. Terminology.

This section GB/T 18029 Part 19.

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

This section uses the translation method identical with ISO 7176-19:2008 "Wheelchairs - Part 19. Wheel can be used for vehicle seats shift Actuating means. " Consistency correspondence between this part of international documents and normative references of our files are as follows.

--- GB/T 18029.5-2008 Wheelchairs - Part 5. Dimensions, mass and turning space measurement (ISO 7176-5.

1986, IDT)

--- GB/T 20953-2007 Determination of agricultural and forestry tractors and machinery cab interior material combustion characteristics (ISO 3795. 1989, MOD) Please note that some

of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This section proposed by the People's Republic of China Ministry of Civil Affairs.

This part of the National Rehabilitation and special equipment Standardization Technical Committee on Persons with Disabilities (SAC/TC148) centralized.

This section is drafted. Fujian orthopedic products tested by the National Research Center for Rehabilitation Technical Aids.

Introduction

Traffic safety research shows that the vehicle is an important part of the seat occupant safety limit system, in all kinds of traffic accidents to reduce the ride Danger of serious injury who plays a key role. Of particular note is that the vehicle seat belt should occupant bones Regional position, when the impact can not be increased occupant load, and can provide effective support for the occupant to the seat belt in Entire collision course remain in the normal position of the bone area. There are people with physical disabilities, whether the driver or passenger, took the opportunity to move in Usually a wheelchair in the car when the car must travel. Since most wheelchairs are not designed for this purpose, and in the event of a traffic accident, sitting Higher risk in the wheelchair seat occupant sitting in the vehicle than in the original seat occupant hurt.

ISO 10542-1 gives the wheelchair and secured safety limit system design, performance, and identify the manufacturer of the relevant documentation requirements, and Provisions of the relevant detection method. For a motor vehicle seat for wheelchair, this part of GB/T 18029 through the establishment of design, performance, logo, and requires manufacturers and related files detection method, part of the wheelchair seat occupant protection systems make a statement.

When the relevant part of the standard setting, around the world there are various types of wheelchairs and security systems. In actual use wheelchairs Securing the stability of the system needs effective vehicle wheelchair and security systems combined. Four o'clock belt fastener suitable for most models and Sized wheelchair, is considered the most effective, the most common and widely accepted fixation. For these reasons, this part of the criteria to be Ask for a motor vehicle seat wheelchair using a four-point belt fastener system offers at least four securing points, two in front, two behind. for Wheelchair other fixation methods, such as butt-type fastening system, this part of GB/T 18029 also specifies the test methods.

To assess the crashworthiness of the wheelchair, the provisions of Appendix A kinetic test procedures. Load the correct size of the wheelchair positive impact dummy Pulley fixed on collision at a speed of 48km/h crash test performed. This test is based on a number of known vehicle collision and injury statistics Meter data on the basis of these data show that over 50% of serious injury motor vehicle occupant is caused by a frontal impact, the lack of

speed 48km/h when more than 95% of the head-on collision caused by a motor vehicle longitudinal deformation. The rear seats forward facing wheelchair, side collision dynamics You will be able to test the standard set forth in the future.

GB/T 18029 in this part of the view that when the vehicle frontal collision, only the Department of the pelvic harness occupant can not be obtained simultaneously shoulder and pelvic harness level of protection. Therefore, the relevant provisions of this section and test methods GB/T 18029 requirements and is based while with pelvic belts and shoulder belts.

When GB/T 18029 in this part of the preparation, four-point belt fastener system is effectively fixed variety of wheelchairs most common and the most common side Method, but this method requires another person to operate, they can not complete the occupant secured. It is therefore desirable to develop a wheelchair can be made Occupant complete fixation fastener alone, wheelchair occupants may use different public transport or private vehicles. To achieve to this end, this part of GB/T 18029 contains a normative appendix (Appendix F), public transport or private motor For Wheelchair docking fixture used car, Appendix F developed a universal butt joint geometry specifications wheelchair securing points (UDIG).

Finally, wheelchair and all everyday use wheelchairs should comply with a series of criteria, general considerations in this part of the standard. First by wheelchair as an effective means to move, therefore, it should comply with the relevant requirements of the standard GB/T 18029 other parts of the regulations. Only traffic travel Only wheelchair and its occupant has a unique use of environmental requirements in their daily lives. In line with GB/T 18029 in this section Products for the wheelchair when the wheelchair occupant in the vehicle by providing a higher level of security. However, no accord this section GB/T 18029 requirements of wheelchair should not limit its use in a motor vehicle transportation.

Wheelchairs - Part 19.

Wheeled mobile device can be used for vehicle seats

1 Scope

This section GB/T 18029 specifies the wheelchair design requirements, performance requirements and related test methods, also provides for a wheelchair Vehicle identification, pre-sales documents, instructions and warnings and so on.

These provisions apply to the whole base frame wheelchairs and seating systems constituted also applies to systems with additional components (designed to meet a or more of the requirements) of the wheelchair.

This section applies to all manual and power wheelchairs, including scooters, which in addition to the basic functions for wheeled mobile, but also often used as the vehicle to the