

Specification for

Safety requirements for wheeled child conveyances

Caractéristiques de sécurité des dispositifs de
transport à roues pour enfants —
Spécifications

Kinderwagen; Sicherheitsanforderungen

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Consumer and Contract Goods Standards Policy Committee (CCM/-) to Technical Committee CCM/39, upon which the following bodies were represented:

Association for Consumer Research (ACRE)
Association for Consulting Scientists
Baby Products Association
British Association of Nursery and Pram Retailers
British Retailers' Association
Co-operative Wholesale Society Ltd
Consumer Policy Committee of BSI
Department of Trade and Industry (Consumer Safety Unit, CA Division)
Furniture Industry Research Association
Institute of Trading Standards Administration
Royal Society for the Prevention of Accidents

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**Specification for safety requirements for
wheeled child conveyances**

Revised text

AMD 7177
July 1992

Clause 12 Safety harness

Immediately after the clause heading insert the following note.

'NOTE. The requirements in this clause are intended to help prevent children from falling or climbing out of the product.'

AMD 7177
July 1992

Clause 12.1 Seat and chassis assemblies

Delete the second sentence and substitute the following.

'The waist strap shall be positively located on a rigid part of the structure, excluding any bumper bar, but any straps may be designed to be reversible. The crotch strap shall be linked to the waist strap.'

Immediately after the fourth sentence insert the following.

'The shoulder straps shall meet the seat back at a point not less than 250 mm above the dividing line between the seat and the backrest. In hammock type seats, the point shall be determined using the apparatus described in appendix P.'

AMD 7177
July 1992

Clause 17 Marking

Delete the entire text, except for the associated footnote 1), and substitute the following.

'17.1 Bodies, seats and chassis that comply with this standard shall be permanently marked with the following.

(a) The name, trademark or other means of identification of either the UK manufacturer, UK distributor or UK retailer.

(b) The number and date of this British Standard, i.e. BS 7409 : 1991¹⁾.

17.2 Bodies, seats or chassis designed for attachment to specific mating units shall bear a permanent label that identifies the mating unit or units.

17.3 Seats of the non-reclining type (i.e. if the angle between the back and the horizontal is not adjustable to give an angle of less than 60°) shall have a permanent notice in a prominent position stating:

'Not recommended for a child under 6 months old.'

17.4 Bodies and chassis that can be sold separately and complete vehicles shall have a permanent notice in a prominent position stating:

'WARNING. A CHILD'S SAFETY IS YOUR RESPONSIBILITY

Children should be harnessed in at all times and should never be left unattended. The child should be clear of moving parts while making adjustments. This vehicle requires regular maintenance by the user. Overloading, incorrect folding and the use of non-approved accessories may damage or break this vehicle.

Read the manufacturer's instructions.'

The heading shall be in at least 10 point uppercase (approximately 2.5 mm high) and the remainder of the wording shall be in 10 point lowercase.

17.5 Permanent labels shall be conspicuous and legible and shall be securely attached along all their edges. When tested in accordance with appendix W the label shall not be easily removed, it shall show no curling and the marking shall be easily legible.

AMD 7177
July 1992

Clause 18 Instructions on use and maintenance

In item (i), after the word 'body' in line 2 insert the following.

'at, or at any position within 300 mm from, the harness attachment points'

AMD 7177
July 1992

Appendix R.2 Removable wheels

In line 1 delete '500' and substitute '200'.

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Foreword

This British Standard has been prepared under the direction of the Consumer and Contract Goods Standards Policy Committee. It supersedes BS 4139 : 1986 and BS 4792 : 1984. BS 4139 : 1986 is withdrawn but BS 4139 : 1967 and BS 4792 : 1984 are not withdrawn as they are referred to in legislation. This standard also supersedes part of BS 3881 : 1986 which is not yet withdrawn¹⁾.

There are now many new designs of vehicles for conveying babies and small children and many of these designs can be used as either a perambulator or a pushchair. For this reason it was felt to be more practical to have one standard for all such items rather than three separate ones which contain a number of common requirements. This standard does not cover any special requirements for the use of detachable bodies in motor vehicles.

Compliance with a British Standard does not of itself confer immunity from legal obligations. In particular attention is drawn to the following statutory instruments:

Statutory Instrument 1978 No. 1372 The Perambulators and Pushchairs (Safety) Regulations;

Statutory Instrument 1985 No. 2047 The Pushchairs (Safety) Regulations;

Statutory Instrument 1988 No. 1324 The Furniture and Furnishings (Fire) (Safety) Regulations;

Statutory Instrument 1989 No. 2358 The Furniture and Furnishings (Fire) (Safety)(Amendment) Regulations.

¹⁾ Bodies designed solely for use as carry cots and Moses baskets, i.e. items not designed for use with a chassis, will be the subject of a separate standard which is in preparation and which will supersede BS 3881 : 1986.

Specification

1 Scope

This British Standard specifies safety requirements for wheeled conveyances for one or more children.

It does not cover wheeled conveyances designed for invalid children and does not specify requirements for accessories or products not designed for use with a chassis.

NOTE 1. Bodies designed solely for use as carry cots and Moses baskets, i.e. items not designed for use with a chassis, will be the subject of a separate standard which is in preparation.

NOTE 2. The titles of the publications referred to in this standard are listed on the inside back cover.

2 Definitions

For the purposes of this standard the following definitions apply.

2.1 applied

A parking device is considered to be applied when the user has fully and correctly operated any lever or other device that is intended to be used in order to change the condition of the parking device from one in which it is not preventing and will not prevent movement of the vehicle or rotation of the wheel or wheels on which it operates. The parking device is considered to be applied as soon as the operation by the user of that lever or other device has been completed and no account is taken of whether or not the completion of that operation causes the parking device to become immediately effective in preventing movement of the vehicle or rotation of the wheel or wheels on which it operates. The word 'apply' is construed accordingly.

2.2 body

A structure of boat or box-like shape primarily designed to transport a child in an essentially horizontal position.

2.3 chassis

A wheeled framework with an extended handle or handles for pushing and steering, designed to accommodate and transport a body or seat.

2.4 seat

A structure primarily designed to support a child in a sitting position, that may or may not be adjustable to achieve a reclining or recumbent position.

2.5 wheel

Either a single wheel or a set of adjacent wheels attached to the same mounting point, unless otherwise stated.

2.6 wheeled child conveyance

A wheeled vehicle designed for the carriage of one or more children.

NOTE. The term wheeled conveyance is intended to cover the whole range of vehicles currently available or likely to be developed and includes perambulators, pushchairs, strollers, combination perambulators and the like.

3 Materials

3.1 Plastics

Plastics on all parts of the vehicle, whether exposed or accessible to a child, shall not contain a proportion by mass of any soluble antimony, arsenic, barium, cadmium, chromium, lead or mercury or any soluble compound of any of those elements, which exceeds the following amounts when determined in accordance with 8.2 and 9.2 of BS 5665 : Part 3 : 1989.

antimony	250 mg/kg;
arsenic	100 mg/kg;
barium	500 mg/kg;
cadmium	100 mg/kg;
chromium	100 mg/kg;
lead	250 mg/kg;
mercury	100 mg/kg.

3.2 Coatings and finishes

Any coating of paint, varnish, lacquer or similar substance on any part of the vehicle, whether exposed or accessible to a child, shall not contain a proportion by mass of any soluble antimony, arsenic, barium, cadmium, chromium, lead or mercury, or any soluble compound of any of those elements, which exceeds the following amounts when determined in accordance with 8.1 and 9.1 of BS 5665 : Part 3 : 1989.

antimony	250 mg/kg;
arsenic	100 mg/kg;
barium	500 mg/kg;
cadmium	100 mg/kg;
chromium	100 mg/kg;
lead	250 mg/kg;
mercury	100 mg/kg.

Where a surface is coated with a multi-layer of paint or similar coating, the sample shall be taken down to the substrate.

3.3 All materials

Where different parts of a vehicle are coated with different materials, the coating of each part shall comply with 3.1 and 3.2.

3.4 Linings

Where linings are of plastics or plastics coated material they shall be not less than 0.27 mm thick. Where linings are of fabric that is not coated with plastics they shall be so tensioned as not to present an undue ingestion hazard to the child. When tested in accordance with BS 1006, section E04, lining of fabric not coated with plastics shall give a numerical rating for change in colour of not less

than 4 and for staining of not less than 3. When tested in accordance with BS 1006, section X12, lining of fabric not coated with plastics shall give a numerical rating for staining of not less than 3-4 for both wet and dry rubbing.

4 Construction

4.1 Vehicles shall not contain any open-ended tubes projections, holes, loose washers, speed fixings, nuts, crevices or closing mechanisms in which a child's finger(s) or flesh are likely to be trapped when the vehicle is assembled in a functional or apparently functional manner.

4.2 Vehicles shall not have any exposed or accessible edges, points or burrs sharp enough to inflict a wound or abrasion.

4.3 Any permanent fixture that can be gripped by a child's fingers or teeth shall be attached to the vehicle in such a manner that it cannot be removed or broken by applying a force of 90 N in any direction to the fixture.

4.4 Any part of the vehicle that is essential for its safe operation shall be attached in such a manner that it cannot be displaced from a normal operating position or broken when a force of 90 N is applied in any direction to that part.

NOTE. This requirement does not apply to the force needed to operate any locks, levers, parking devices or any other device intended to be operated by the user.

4.5 Any detachable component, the removal of which would be hazardous to the child, shall be attached to the vehicle in such a manner that the means of attachment shall be either:

- (a) inaccessible to the child whilst in the vehicle; or
- (b) incapable of being operated by the child.

Any detachable component shall comply with the requirements of 3.2.2.1 of BS 5665 : Part 1 : 1989.

4.6 It shall not be possible to assemble the vehicle in such a manner that the parking device is not effective.

4.7 Any handle that is adjustable, e.g. such as those that have a telescopic action to adjust the length, shall not present a finger entrapment hazard, as described in 4.1, throughout its total range of movement.

5 Parking devices

5.1 For the purposes of this clause and of appendix A each reference to a wheel shall be taken to mean a single wheel. Vehicles shall have a parking device that limits movement of the vehicle as specified in 5.2 to 5.6.

5.2 There shall be no visible damage to the mechanism of the parking device when tested in accordance with A.2.

5.3 This subclause shall apply to those parking devices that, when applied, make use of the engagement of a pin, rod, clip or other such device in a series of holes, notches or other indentations in, or protrusions on, a wheel or attachment to a wheel in order to prevent rotation of that wheel.

For the purposes of determining the maximum amount of movement permitted by such parking devices when they are applied, these parking devices shall be divided into two categories, type A and type B, as follows.

(a) Type A parking devices. A parking device shall be of type A if, when the parking device is applied, the pin, rod, clip or other device always immediately enters one of the series of holes, notches or other indentations in, or is always immediately inserted between protrusions on, a wheel or attachment to a wheel in order to prevent rotation of that wheel.

(b) Type B parking devices. A parking device shall be of type B if, after the parking device has been applied, it may still be necessary to rotate the wheel or wheels on which it operates before the pin, rod, clip or other device enters one of the series of holes, notches or other indentations in, or is inserted between protrusions on, a wheel or attachment to a wheel in order to prevent rotation of that wheel.

The distance between the two points marking the position of each wheel, determined in accordance with the relevant method described in A.3, shall be not greater than 40 mm.

5.4 This subclause shall apply to all parking devices. When the parking device is applied it shall comply with the following requirement without further movement of the device on the part of the user.

The parking device shall maintain the vehicle in a static condition on the slope specified in A.4 when the vehicle is placed on that slope and released under the conditions specified in that subclause.

5.5 This subclause shall apply to all parking devices. The distance between the two points marking the position of each wheel, determined in accordance with A.5, shall not exceed 40 mm, provided that, in the case of a parking device to which 5.3 applies, for any given wheel the sum of the distance between the two marked points, determined in accordance with the relevant method described in A.3, and the distance determined in accordance with A.5, when the vehicle is in a corresponding position, shall not exceed 40 mm.