Superseded by AS 1754-1991

Amendment 1 - May 1990

Dup

AS 1754.1—1989

Australian Standard®

Child restraint systems for use in motor vehicles

Part 1—General requirements

For referenced documents see p. 5

STANDARDS AUSTRALIA
24 JAN 1989
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This Australian Standard was prepared by Committee CS/75, Automotive Occupant Restraints. It was approved on behalf of the Council of Standards Australia on 17 October 1988 and published on 16 January 1989.

The following interests are represented on Committee CS/75:

Attorney-General's Department
Australian Automobile Association
Australian Automotive Aftermarket Association
Australian Consumers Association
Australian Federation of Consumer Organizations Inc.
Business and Consumer Affairs, N.S.W.
Confederation of Australian Industry
Department of Motor Transport, N.S.W.
Department of Transport, S.A.
Department of Transport and Communications
Federal Chamber of Automotive Industries
Federation of Automotive Products Manufacturers
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This Standard was issued in draft form for comment as DR 86119.

STANDARDS AUSTRALIA

Amendment No 1
to
AS 1754.1—1989
Child restraint systems for use in motor vehicles
Part 1: General requirements

STANDARDS AUSTRALIA
- 1 JUN 1990
SURREY INFO. CENTRE

REVISED TEXT

The 1989 edition of AS 1754.1 is amended as follows; the amendment(s) should be inserted in the appropriate place.

SUMMARY: This Amendment applies to Clause 1.5, Clause 2.5, Clause 3.2, Clause 3.5.3, Clause 3.5.4, Clause 4.1, Clause 4.2, Table 4.1 and new footnote to Page 11.

Published on 7 May 1990.

AMDT No 1 MAY 1990

Page 4 and Page 5. Clause 1.5.

Delete the Clause and *substitute:*

1.5 REFERENCED DOCUMENTS. The documents below are referred to in this Standard.

AS	
1249	Children's nightclothes having reduced fire hazard
1753	Webbing for restraining devices for occupants of motor vehicles
2596	Seat belt assemblies for motor vehicles
2597	Methods of testing seat belts
2597.1	Part 1: Determination of webbing durability in adjustment duty
2597.4	Part 4: Determination of potential for inadvertent buckle release
2597.6	Part 6: Determination of adjustment device forces
2597.7	Part 7: Determination of locking angle of tiltlock adjustment device
2755	Textile fabrics—Determination of burning behaviour
2755.3	Part 3: Determination of surface burning time
3629	Methods of testing child restraints
3629.1	Part 1: Dynamic test
3629.2	Part 2: Determination of hazardous throat contact in abnormal situations
E35.1	Part 1: Seat belt assemblies for motor vehicles
E35.2	Part 2: Seat belt assemblies (including retractors) for motor vehicles
ADR	
4	Australian design rules for seat belts (and subsequent editions)
5 & 5B	Australian design rules for seat belt anchorages (2nd edition)
5/00	Australian design rules for anchorages for seat belts and child restraints (and subsequent editions)
34 & 34A	Australian design rules for child restraint anchorages (2nd edition)
ISO	
3795	Road vehicles—Determination of burning behaviour of interior materials for motor vehicles
ASTM	
B 117	Method for salt spray (fog) testing
FMVSS	
302	Flammability of interior materials—Passenger cars, multipurpose passenger vehicles, trucks and buses
SAE	
J369a	Flammability of automotive interior materials—Horizontal test method

AMDT No 1 MAY 1990

Page 7. Clause 2.5.

Delete existing clause and *substitute:*

2.5 UNCOATED FABRICS. Uncoated fabrics, including trimmings and attachments, but excluding webbing, shall be subjected to the surface burning test as specified in AS 2755.3, and the results determined in accordance with the provisions thereof shall comply with the following requirement:

The minimum surface burning time shall be not less than 10 s.

The fabrics shall meet the above requirement both before and after washing in accordance with AS 1249.

Page 8. Clause 3.2.

Delete Item (d) and *substitute:*

(d) Any crotch strap shall be designed and located so as not to load the genital region of the child. It shall provide for a maximum length, but may be adjustable within that length.

Page 8. Clause 3.2.

Delete Item (f) and *substitute:*

(f) The means of harness adjustment(s) shall be visible and accessible to an adult operator, when the child restraint is installed in a vehicle.

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AMDT No 1 MAY 1990

Page 8. Clause 3.2.

Delete Item (g).

AMDT No 1 MAY 1990

Page 9. Clause 3.5.3.

Delete the word 'should' in the second paragraph of Item (c) and *substitute* the word 'shall'.

Page 9. Clause 3.5.4.

Delete the second paragraph and *substitute:*

Anchorage components shall not load the webbing appreciably off-centre during forward or rearward decelerations to the vehicle.

AMDT No 1 MAY 1990

Page 11. Clause 4.1.

Add new paragraph as follows:

Child restraints shall be tested using the dummy applicable to each type of child restraint, and specified in the respective part of AS 1754. Test dummies shall be as specified in technical drawings produced by TNO (Research Institute for Road Vehicles)*, Netherlands.

Page 11. Clause 4.2.

Delete Item (d) and *substitute:*

Other than where leg straps are incorporated, show no contact of the harness or straps with the genital region of the dummy.

AMDT No 1 MAY 1990

Page 11.

Add new footnote as follows:

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* TNO address: Schoemaker Street, 972628, VK Delft, Netherlands.

AMDT No 1 MAY 1990

Page 11. Table 4.1.

Delete the table and *substitute:*

TABLE 4.1
TEST SCHEDULE

Test specimen		Test method	
Complete child restraint		Dynamic performance AS 3629.1 (see Clause 4.2)	Frontal
			Sideways
			Rearwards
Complete child restraint		Emergency release performance (see Clause 3.4(a))	
Complete child restraint		Hazardous throat contact AS 3629.2 (see AS 1754.4)	
Metal parts		ASTM B 177 (see Clause 2.4)	
Fabrics and chair material	Uncoated fabrics	AS 1249, AS 2755.3 (see Clause 2.5)	
	Coated fabrics and chair material	SAE J369a (see Clause 2.6)	
Each adjuster		Adjustment operation, AS 2597.6, AS 2597.7 (see Clause 3.8)	
Adjusters (webbing)		Durability test, AS 2597.1 (see Clause 3.10)	
Quick release device		Partial engagement potential (see Clause 3.4(d))	
Quick release device		Inadvertent release potential, (see Clause 3.4(e))	

AS 1754.1—1989

Australian Standard®

Child restraint systems for use in motor vehicles

Part 1—General requirements

First published as part of AS E46—1970.
Revised and redesignated AS 1754—1975.
Revised in part and redesignated AS 1754.1—1989.

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PREFACE

This Standard was prepared by the Standards Australia Committee on Automotive Occupant Restraints, to supersede (in part) AS 1754—1975, *Child restraints for passenger cars and derivatives* which will be withdrawn at a date to be decided and after sufficient time has elapsed for manufacturers and others to change to this Standard.

This Standard deals with general requirements for all types of child restraints. Other Standards in this series specify additional requirements for the different types of child restraints.

The methods of testing child restraints are presented in a separate series of Standards (AS 3629), the first of which is the dynamic test method, which is being published simultaneously with this Standard.

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STANDARDS AUSTRALIA

Australian Standard
CHILD RESTRAINT SYSTEMS FOR USE IN MOTOR VEHICLES

PART 1: GENERAL REQUIREMENTS

SECTION 1. SCOPE AND GENERAL

1.1 SCOPE. This Standard specifies general requirements for restraining devices for child occupants of passenger cars and their derivatives, such devices being intended, when properly selected, correctly installed, and correctly adjusted, to reduce the risk of bodily injury in a vehicle impact. The devices may also have application to other types of vehicle.

1.2 APPLICATION. This Standard should be read in conjunction with the appropriate Standard for a specific type of child restraint.

1.3 NEW DESIGNS AND INNOVATIONS. Any novel designs, materials, methods of attachments, procedures, etc, which do not comply with a specific requirement of this Standard, or are not mentioned in it, but which give equivalent results and performance to those specified, are not necessarily prohibited. The SAA Committee on Automotive Occupant Restraints can act in an advisory capacity concerning equivalent suitability, but specific approval remains the prerogative of the relevant authority.

1.4 TYPE DESIGNATION. Child restraints shall be designated in accordance with the following:

(a) Type A1—rearward-facing enclosing restraint, normally suitable for children whose mass is up to 9 kg, and corresponding supine length is up to 700 mm.

(b) Type A2—transversely installed enclosing restraint, normally suitable for children whose mass is up to 9 kg, and corresponding supine length is up to 700 mm.

(c) Type B—forward-facing chair with harness, normally suitable for children whose mass is within the range 8 kg to 18 kg.

(d) Type C1—forward-facing harness without chair, not incorporating an adult seat belt; normally suitable for children whose mass is within the range 14 kg to 21 kg.

(e) Type C2—forward-facing harness without chair, incorporating an adult lap seat belt or a converted lap-sash seat belt; normally suitable for children whose mass is within the range 14 kg to 21 kg.

(f) Type D—forward-facing enclosing restraint, normally suitable for children whose mass is within the range 8 kg to 18 kg.

(g) Type E—rearward-facing enclosing restraint, normally suitable for children whose mass is within the range 8 kg to 18 kg.

(h) Type F—rearward-facing chair with harness, normally suitable for children whose mass is within the range 8 kg to 18 kg.

(i) Type G—a restraint consisting of a cushion, chaise, or converter used in conjunction with an adult lap-sash seat belt, or Type C1 or Type C2 child restraint; normally suitable for children whose mass is within the range 14 kg to 21 kg.

NOTE: If the upper torso restraint is provided by an adult lap-sash seat belt, Type G child restraints may be suitable for children whose mass is up to 36 kg.

Converters, cushions, or chaises, as appropriate, may be included in some types of child restraints if applicable.

SEE AMENDMENT 1

1.5 REFERENCED DOCUMENTS. The documents below are referred to in this Standard.

AS

1176 Textiles—Methods of test for combustion properties
1176.1 Part 1: The determination of ease of ignition of certain textile materials in a horizontal plane
1176.2 Part 2: The determination of burning time of textile materials
1176.3 Part 3: Determination of surface burning properties of certain textile materials

1248 Fabric for domestic apparel of the low fire hazard type

1753 Webbing for restraining devices for occupants of motor vehicles

2596 Seat belt assemblies for motor vehicles

2597 Methods of testing seat belts
2597.1 Part 1: Determination of webbing durability in adjustment duty
2597.4 Part 4: Determination of potential for inadvertent buckle release
2597.6 Part 6: Determination of adjustment device forces
2597.7 Part 7: Determination of locking angle of tilt-lock adjustment device

3629 Methods of testing child restraints
3629.1 Part 1: Dynamic test

E35.1 Part 1: Seat belt assemblies for motor vehicles
E35.2 Part 2: Seat belt assemblies (including retractors) for motor vehicles

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