

Australian Standard™

**Caravan and light trailer towing
components**

Part 3: Coupling body for ball couplings

This Australian Standard was prepared by Committee ME-052, Caravan and Light Trailer Components. It was approved on behalf of the Council of Standards Australia on 4 May 2004 and published on 17 June 2004.

The following are represented on Committee ME-052:

Australian Automobile Association
Australian Automotive Aftermarket Association
Australian Chamber of Commerce and Industry
Australian Industry Group
Caravan Industry Australia
Commonwealth Department of Transport and Regional Services
Consumers' Federation of Australia
Federal Chamber of Automotive Industries
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Originated as part of AS D18—1968.
Previous edition AS 4177.3—1994.
Second edition 2004.

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Published by Standards Australia International Ltd
GPO Box 5420, Sydney, NSW 2001, Australia

ISBN 0 7337 6063 5

PREFACE

This Standard was prepared by Standards Australia Committee ME-052, Caravan and Light Trailer Components, to supersede AS 4177.3—1994, *Caravan and light trailer towing components, Part 3: Coupling body for ball couplings*.

This Standard is Part 3 of AS 4177, *Caravan and light trailer towing components*, which is published in Parts as follows:

- Part 1: Towbars and towing brackets
- Part 2: 50 mm towballs
- Part 3: Coupling body for ball couplings (this Standard)
- Part 4: Safety chains up to 3500 kg capacity
- Part 5: Electrical connectors

The objective of this Standard is to provide manufacturers and users, with design and performance requirements for 50 mm towball coupling bodies for ball couplings for trailers and caravans up to 3.5 t aggregate trailer mass, for use on public roads.

In this revision, a new clause, 'Installation requirements', has been introduced to replace the clauses 'Attachments of coupling body to trailer structure' and 'Mounting of coupling body' in the 1994 edition. Also in this revision, Amendment 1 to the 1994 edition has been incorporated.

The term 'normative' has been used in this Standard to define the application of the appendix to which it applies. A 'normative' appendix is an integral part of a Standard.

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STANDARDS AUSTRALIA

Australian Standard
Caravan and light trailer towing components**Part 3 Coupling body for ball couplings****1 SCOPE**

This Standard specifies requirements for coupling bodies for ball couplings suitable for use with 50 mm towballs complying with AS 4177.2, for trailers and caravans up to 25 t aggregate trailer mass, for use on public roads.

The method of determining the static strength of a coupling body and its attachments to the trailer drawbar and towball is given in Appendix A and the dynamic strength is given in Appendix B.

NOTES:

- 1 Towbars and towballs are specified in AS 4177.1 and AS 4177.2 respectively.
- 2 The requirements for off-road applications are beyond the scope of this Standard.
- 3 Three rating classes are specified in this Standard, i.e. Type 1500 kg, Type 2000 kg, and Type 3500 kg.

2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

- 4177 Caravan and light trailer towing components
4177.1 Part 1: Towbars and towing brackets
4177.2 Part 2: 50 mm towballs

ADR* Australian Design Rules for Motor Vehicles and Trailers

3 DEFINITIONS

For the purpose of this Standard, the definitions below apply.

3.1 Aggregate trailer mass

The total mass of the laden trailer when carrying the maximum load recommended by the manufacturer. This includes any mass imposed on the towing vehicle when the combination vehicle is resting on a horizontal supporting plane.

3.2 Coupling

A mechanical assembly which provides a connection between the drawbar of the trailer and the towbar of the towing vehicle.

3.3 Coupling body

The portion of a ball coupling intended for attaching to a drawbar, together with necessary facilities for attaching.

* Australian Design Rules for Motor Vehicles and Trailers. This reference refers to the latest edition of the Design Rules.