

Australian Standard™

**Caravan and light trailer towing  
components**

**Part 5: Electrical connectors**

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.

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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  
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*This Standard was issued in draft form for comment as DR 03264.*

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## **Caravan and light trailer towing components**

### **Part 5: Electrical connectors**

Originated as AS D5—1965.  
Previous edition AS 4177.5—1995.  
Second edition 2004.

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

ISBN 0 7337 6065 1

## PREFACE

This Standard was prepared by Standards Australia Committee ME-052, Caravan and Light Trailer Components, to supersede AS 4177.5—1995, *Caravan and light trailer towing components*, Part 5: *Electrical connectors*.

This Standard is Part 5 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 bodies
- Part 4: Safety chains up to 3500 kg capacity
- Part 5: Electrical connectors (this Standard)

The objective of this Standard is to provide manufacturers and users with specifications for the compatibility and performance of electrical connectors for making detachable electrical connections between motor vehicles and trailers fitted with electrical equipment normally d.c. voltage of 6 V, 12 V or 24 V. Also specifies connector designs which include 12-pin and 7-pin sockets and plugs.

In this revision, 7-pin socket design has been included.

This Standard only applies to the design and performance of electrical connectors not to their installation—with the exception of trailer wiring.

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

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**Australian Standard**

**Caravan and light trailer towing components**

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Part 5: Electrical connectors

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## 1 SCOPE

This Standard specifies requirements for the compatibility and performance of electrical connectors for making detachable electrical connections between motor vehicles and trailers fitted with electrical equipment normally operating at a nominal d.c. voltage of 6 V, 12 V or 24 V.

The method of testing the performance is given in Appendix A and dimensions and assemblies for 7-pin socket and plug, and 12-pin socket and plug are given in Appendix B.

## 2 REFERENCED DOCUMENTS

The following documents are referred to in this Standard:

AS

2331 Methods of test for metallic and related coatings

2331.3.1 Part 3.1: Corrosion and related property tests—Neutral salt spray (NSS) test

## 3 DEFINITIONS

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

### 3.1 Connector

A two-part device intended for making a detachable connection (electrical) between a motor vehicle and trailer.

### 3.2 Contact

The mating components of a connector through which the electrical connection between plug and socket is made.

### 3.3 Motor vehicle

A self-propelled vehicle used on a public road.

### 3.4 Plug

The part of a connector that is normally attached by flexible cable to the trailer.

### 3.5 Shall

Indicates that a statement is mandatory.

### 3.6 Should

Indicates a recommendation.

### 3.7 Socket

The part of a connector that is normally fixed to the rear of the motor vehicle.

### 3.8 Terminal

The device at the rear of the plug and the socket to which each conductor is connected.