

Australian Standard[®]

**Commercial road vehicles—Mechanical
connections between towing vehicles**

**Part 5: Strength tests for pin-type
couplings and drawbar eyes for hinged
drawbars**



This Australian Standard® was prepared by Committee ME-053, Heavy Road Vehicles. It was approved on behalf of the Council of Standards Australia on 14 August 2008. This Standard was published on 21 October 2008.

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 - Australian Trucking Association
 - Commonwealth Department of Transport and Regional Services, Australia
 - Department for Planning and Infrastructure, WA
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 - Road Transport Forum, New Zealand
 - Society of Automotive Engineers, Australasia
 - The Commercial Vehicle Industry Association of Australia
 - The Institute of Road Transport Engineers of New Zealand
 - Truck Industry Council, Australia
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STANDARDS AUSTRALIA

RECONFIRMATION

OF

AS 2213.5—2008

**Commercial road vehicles — Mechanical connections between towing vehicles
Part 5: Strength tests for pin-type couplings and drawbar
eyes for hinged drawbars**

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Truck Industry Council

NOTES

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PREFACE

This Standard was prepared by the Standards Australia Committee ME-053, Heavy Road Vehicles, to supersede AS 2213.5—1998, *Commercial road vehicles—Mechanical connections between towing vehicles, Part 5: Strength test for pin-type couplings and drawbar eyes for hinged drawbars*. It is identical with, and has been reproduced from, ISO 8718:2001, *Road vehicles—Drawbar couplings and eyes for hinged drawbars—Strength tests*.

The purpose of the Standard is to specify test conditions and strength requirements to be met by drawbar couplings and corresponding drawbar eyes for hinged drawbars.

This Standard is part of AS 2213, *Commercial road vehicles—Mechanical connections between towing vehicles*, which covers the design and manufacture of mechanical couplings and comprises the following parts:

- Part 1: Selection and marking of pin-type couplings and drawbar eyes
- Part 2: 50 mm pin-type couplings and drawbar eyes
- Part 3: 40 mm pin-type couplings and drawbar eyes
- Part 4: Strength tests for pin-type couplings and drawbar eyes for rigid drawbars
- Part 5: Strength tests for pin-type couplings and drawbar eyes for hinged drawbars

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References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
1102	Commercial road vehicles—50 mm drawbar—Interchangeability	2213	Commercial road vehicles—Mechanical connections between towing vehicles
		2213.2	Part 2: 50 mm pin-type couplings and drawbar eyes
8755	Commercial road vehicles—40 mm drawbar eye—Interchangeability	2213.3	Part 3: 40 mm pin-type couplings and drawbar eyes

Only international references that have been adopted as Australian Standards have been listed.

AUSTRALIAN STANDARD

Commercial road vehicles—Mechanical connections between towing vehicles

Part 5:

Strength tests for pin-type couplings and drawbar eyes for hinged drawbars

1 Scope

This International Standard specifies strength test conditions and requirements for the 40 mm and 50 mm drawbar couplings and corresponding drawbar eyes for hinged drawbars.

NOTE See ISO 3584 [1] for couplings, and ISO 1102 [2] and ISO 8755 [3] for eyes.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 1176, *Road vehicles — Masses — Vocabulary and codes*

3 Terms and definitions

For the purposes of this International Standard, the terms and definitions given in ISO 1176 apply.

4 General test requirements

4.1 The test shall be carried out with drawbar couplings and drawbar eyes having corresponding functional dimensions.

4.2 The strength tests specified in this International Standard are static and dynamic tests that shall be performed on a test bed.

4.3 The fixing arrangements for the drawbar coupling and the drawbar eye on the test bed shall be the same as those for their attachment to the vehicle, and shall be in accordance with the drawbar manufacturer's fitting instructions.

4.4 Drawbar couplings and drawbar eyes may be tested separately or together.

4.5 Couplings should preferably be tested in the original condition as designed for road use. At the discretion of the manufacturer and in agreement with the test laboratory, flexible components may be neutralized if this is necessary for the test procedure and if there is no concern about unrealistic influence on the test result.

4.6 Flexible components that appear to be overstressed due to this accelerated test procedure may be replaced during the dynamic test.