

AMENDMENT 1 - FEB 1979

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Under Revision see DR 82136 of July 1982

AS 1927-1978  
UDC 629.118.3

AS 1927-1985

DJP

# Australian Standard 1927-1978

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## PEDAL BICYCLES



**STANDARDS ASSOCIATION OF AUSTRALIA**

*Incorporated by Royal Charter*



THE FOLLOWING SCIENTIFIC, INDUSTRIAL, CONSUMER AND GOVERNMENTAL organizations and departments were officially represented on the committee entrusted with the preparation of this standard:

Australia Post

Australian Amateur Cyclists Association

Australian Chamber of Commerce

Australian Consumers Association

Australian Federation of Consumer Organizations

Australian Retailers Association

Bureau of Consumer Affairs, W.A.

Confederation of Australian Industry

Department of Consumer Affairs, N.S.W.

Department of Labour Relations and Consumer Affairs, Queensland

Metal Trades Industry Association of Australia

Ministry of Consumer Affairs, Victoria

Road Safety and Traffic Authority of Victoria

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This standard, prepared by Committee CS/10, Pedal Bicycles, was approved on behalf of the Council of the Standards Association of Australia on 18 September 1978, and was published on 1 October 1978.

To keep abreast of progress in industry Australian standards are regularly reviewed. Suggestions for improvements to published standards, addressed to the head office of the Association, are welcomed.

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Amendment No 1

February 1979

**STANDARDS ASSOCIATION OF AUSTRALIA**

Incorporated by Royal Charter

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**AMENDMENT No 1**

to

**AS 1927—1978**

**PEDAL BICYCLES**

*SUMMARY:* The following sections of the standard are covered by this amendment: Preface; Clauses 2.9.5, 2.16.2 and 4.5.2 (corrigenda), Appendix A, Appendix E (corrigenda).

Amendment No 2  
February 1980

STANDARDS ASSOCIATION OF AUSTRALIA  
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**AMENDMENT No 2**  
to  
**AS 1927—1978**  
**PEDAL BICYCLES**

**SUMMARY:** The following sections of the standard are covered by this amendment: Contents: Clauses 1.3, 1.4, 1.6 (new), 2.5; Fig. 2.1; Clauses 2.6.1, 2.9.2, 2.10.2, 3.5, Appendices A, B, C and E.

Published on 18 February 1980.

**AUSTRALIAN STANDARD SPECIFICATION**

# **PEDAL BICYCLES**

**AS 1927—1978**

First published .....	1976
Revised .....	1978

**PUBLISHED BY THE STANDARDS ASSOCIATION OF AUSTRALIA  
STANDARDS HOUSE, 80 ARTHUR ST, NORTH SYDNEY, N.S.W.**

**ISBN 0 7262 1017 X**

## PREFACE

This standard was prepared by the Association's Committee on Pedal Bicycles following submissions from the Australian Consumers Association and the New South Wales Consumer Affairs Council. It was first published in October 1976.

In this revised edition the contents of the standard have been reorganized into four sections as follows:

**Section 1: Scope and general (including marking requirements and instructions for assembly and user maintenance).**

**Section 2: Design requirements for the fully assembled bicycle.**

**Section 3: Performance tests to be carried out on the fully assembled bicycle.**

**Section 4: Performance tests to be carried out on certain subassemblies.**

This was done to follow a logical sequence for checking the design and performance requirements specified.

The following amendments were also agreed upon by the committee after consideration of the latest documents issued by ISO\* TC/149 and research reports on bicycle accidents:

Reference to fully disassembled bicycles has been deleted, and the width of the excluded volume has been decreased from 70 mm to 50 mm to avoid eliminating some models which were considered quite safe. No minimum overall width of the handlebars is specified, valves that enable the pressure in the tyres to be measured are not mandatory, the height limitation on seat supports or accessories of 125 mm above the seat surface has been deleted, amendments have been made to the handlebar assembly tests, and a torque test on the handlebar stem has been introduced.

The deletion of the 'seat limitation' requirement was agreed upon, firstly, because there was insufficient evidence that 'sissy bars' on high rise models had increased the number of pedal cycle accidents and, secondly, because this type of bicycle is losing its popularity. The deletion of the requirement for the valve which would allow the user to measure the pressure in tyres was based on complaints that children were bursting tyres when using compressed air.

Lighting requirements have not been specified, both because this is covered by traffic regulations and because no standard exists at present for bicycle lights.

The aim of the standard is to ensure that bicycles which comply with it shall be as safe as is practically possible. The standard applies to all bicycles with the exception of fully disassembled, competition and specially built bicycles and those having a wheelbase of less than 640 mm, which the committee classified as toys.

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\*International Organization for Standardization.

The fully assembled bicycle is required to comply with the safety aspects of the design specified in Section 2 and the performance requirements specified in Section 3. In addition, some individual components and assemblies must comply with the test requirements specified in Section 4.

The performance tests of the bicycle as a whole and of the individual components demand high quality throughout and prove that the vehicle has an efficient braking system and stable handling characteristics. Wide angle and pedal reflectors are specified to increase a bicycle's visibility when ridden at night.

In developing this standard, the committee considered the requirements specified in the regulations introduced by the Consumer Products Safety Commission in the United States of America, and draft documents prepared by ISO/TC 149.

~~Notwithstanding the requirements specified in this standard, any new designs, constructions, materials and methods of assembly which are capable of demonstrating an equivalent degree of safety and durability may be regarded as complying with this standard pending the issue of an amendment of extension to this standard. SEE AMENDMENT (1)~~

It is strongly recommended that, in view of the nature of this standard, manufacturers and purchasers make use of the scheme operated by the Standards Association of Australia, whereby the product may bear the certification mark of SAA (see Note in Clause 1.4).

This standard requires reference to AS 2142, Reflectors for Pedal Bicycles.

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# CONTENTS

	<i>Page</i>
<b>SECTION 1. SCOPE AND GENERAL</b>	
1.1 Scope ....	6
1.2 Application ....	6
1.3 Definitions ....	6
1.4 Marking ....	7
1.5 Instructions for Use, Maintenance and Assembly ....	7
1.6 <i>Informative Labelling</i> <small>FIG. 200, NOMENCLATURE 2</small>	
<b>SECTION 2. DESIGN REQUIREMENTS—FULLY ASSEMBLED BICYCLE</b>	
2.1 General ....	8
2.2 Assembly ....	8
2.3 Sharp Edges....	8
2.4 Fasteners ....	8
2.5 Projections ....	8
2.6 Control Cables ....	9
2.7 Ground Clearance ....	13
2.8 Toe Clearance ....	13
2.9 Wheels....	13
2.10 Protective Guards ....	14
2.11 Drive Chain ....	14
2.12 Pedals ....	14
2.13 Steering System ....	14
2.14 Seat Pillar ....	15
2.15 Braking System ....	15
2.16 Reflectors ....	17
2.17 Warning Device ....	17
<b>SECTION 3. PERFORMANCE TESTS—FULLY ASSEMBLED BICYCLE</b>	
3.1 General ....	20
3.2 Road Test ....	20
3.3 Proof Test for Children's Bicycles ....	20
3.4 Seat Adjustment Clamps ....	20
3.5 Braking Test....	20

**Page 3. Preface.**

*Delete* existing fourth paragraph on this page and *substitute*:

Any new designs, constructions, materials and methods of assembly which would not comply with this standard but which are capable of demonstrating a degree of safety and durability equivalent to its requirements will be considered with a view to amending the standard to take into account these new developments. ✓

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**Page 4. Contents.**

*Insert* '1.6 Informative Labelling'.

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No 2  
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1980

## STANDARDS ASSOCIATION OF AUSTRALIA

**Australian Standard Specification**  
**for**  
**PEDAL BICYCLES**

## SECTION 1. SCOPE AND GENERAL

**1.1 SCOPE.** This specification sets out safety and performance requirements for the design, assembly and testing of pedal bicycles and sub-assemblies. It lays down guidelines for the instructions to be given in a manual on use and maintenance, and for the instructions for the assembly of bicycles offered for sale in a partially assembled state.

**1.2 APPLICATION.** The specification applies to all types of pedal bicycles other than competition or one-of-a-kind bicycles and those having a wheelbase of less than 640 mm.

Irrespective of whether the bicycles are offered for sale in a completely assembled or partially assembled state, they shall comply with this specification for a completely assembled bicycle.

NOTE: Bicycles having a wheelbase of less than 640 mm are covered by AS 1647, Children's Toys and Playthings (Safety Requirements).

**1.3 DEFINITIONS.** For the purpose of this specification, the following definitions apply:

*Bicycle*—a two-wheeled pedal vehicle that is solely human-powered.

*Children's bicycle*—a bicycle having a wheelbase of between 640 mm and 765 mm inclusive.

NOTE: Except where stated otherwise, the term 'bicycle' as used in this specification includes children's bicycles.

*Competition bicycle*—a bicycle intended for use in cycling competitions, having tubular tyres (singles) fitted as standard.

*One-of-a-kind bicycle*—a bicycle that is uniquely constructed to the order of an individual consumer other than by assembly of stock or production parts.

*Seat height* the dimension from the point on the seat surface intersected by the seat pillar centreline (or the centre of the seating area if no seat pillar exists) and the ground plane, as measured with the wheels aligned and in a plane normal to the ground plane.

*Normal riding position*—the position of the rider seated on the bicycle with both feet on the pedals and both hands on the handlegrips (and in a position that allows operation of handbrake levers if so equipped), the seat and handlebars being adjusted to positions judged by the rider to be comfortable.

*Partially assembled bicycle*

AMENDMENT 2