

Australian Standard<sup>®</sup>

**Agricultural tractor power take-offs**

**Part 4: Guards for power take-off (PTO)  
drive-shafts—Strength and wear tests  
and acceptance criteria**

**STANDARDS**  
Australia



This Australian Standard® was prepared by Committee ME-065, Agricultural Tractors and Machinery. It was approved on behalf of the Council of Standards Australia on 24 May 2007. This Standard was published on 10 August 2007.

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  - Department of Primary Industries and Fisheries Queensland
  - Federated Farmers of New Zealand
  - NSW Department of Primary Industries
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  - Safety Institute of Australia (Incorporated)
  - The University of Melbourne
  - The University of Queensland
  - Tractor & Machinery Association of Australia
  - Victorian WorkCover Authority
  - WorkCover New South Wales
- 

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Standards Australia wishes to acknowledge the participation of the expert individuals that contributed to the development of this Standard through their representation on the Committee and through the public comment period.

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Originally as part of AS 1121—1971.  
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## PREFACE

This Standard was prepared by the Australian members of the Joint Standards Australia/Standards New Zealand Committee ME-065, Agricultural Tractors and Machinery, as a revision, in part, of AS 1121—1983, *Guards for agricultural tractor PTO drives*. After consultation with stakeholders in both countries, Standards Australia and Standards New Zealand decided to develop this Standard as an Australian Standard rather than an Australian/New Zealand Standard.

The objective of this Standard is to provide designers, manufacturers and suppliers of power take-off shafts with means for reducing the risks to the health and safety of those who must work with or near power take-offs by providing requirements for the strength and wear characteristics.

This Standard is identical with and has been reproduced from ISO 5674:2004, *Tractors and machinery for agriculture and forestry—Guards for power take-off (PTO) drive-shafts—Strength and wear tests and acceptance criteria*.

As this Standard is reproduced from an international standard, the following applies:

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text ‘International Standard’ should read ‘this Australian Standard’.
- (c) A full point substitutes for a comma when referring to a decimal marker.

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	
500	Agricultural tractors—Rear-mounted power take-off types 1, 2 and 3 (series)	1121	Agricultural tractors—Rear-mounted power take-off types 1, 2 and 3 (series)
105	Textiles—Tests for colourfastness	2001	Methods of test for textiles—Tests for colour fastness
105-A02	Part A02: Grey scale for assessing change in colour	2001.4.A02	Part 4.A02: Grey scale for assessing change in colour

Other International references not listed have not been adopted as Australian or Australian/New Zealand Standards.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex to which they apply. A ‘normative’ annex is an integral part of a Standard whereas an ‘informative’ annex is only for information and guidance.

## CONTENTS

	<i>Page</i>	
<b>1</b>	<b>Scope .....</b>	<b>1</b>
<b>2</b>	<b>Normative references .....</b>	<b>1</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>1</b>
<b>4</b>	<b>General test conditions .....</b>	<b>2</b>
<b>4.1</b>	<b>Guard .....</b>	<b>2</b>
<b>4.2</b>	<b>Other .....</b>	<b>2</b>
<b>5</b>	<b>Test equipment .....</b>	<b>2</b>
<b>5.1</b>	<b>General .....</b>	<b>2</b>
<b>5.2</b>	<b>Test parameters .....</b>	<b>2</b>
<b>6</b>	<b>Tests .....</b>	<b>4</b>
<b>6.1</b>	<b>General .....</b>	<b>4</b>
<b>6.2</b>	<b>Wear test .....</b>	<b>4</b>
<b>6.3</b>	<b>Bearing corrosion test (Perform only if the guard has bearings running in contact with the PTO-shaft) .....</b>	<b>4</b>
<b>6.4</b>	<b>Strength tests .....</b>	<b>5</b>
<b>6.5</b>	<b>Tests at sub-zero temperature .....</b>	<b>8</b>
<b>6.6</b>	<b>Restraining means test at ambient temperature .....</b>	<b>10</b>
<b>7</b>	<b>Final acceptance criteria .....</b>	<b>11</b>
<b>8</b>	<b>Test report .....</b>	<b>12</b>
<b>Annex A</b>	<b>(normative) Test schedule .....</b>	<b>13</b>
<b>Annex B</b>	<b>(normative) UV test for plastic guards .....</b>	<b>16</b>
<b>Annex C</b>	<b>(informative) Typical test report .....</b>	<b>17</b>
<b>Annex D</b>	<b>(informative) Novel design guard and restraining systems tests .....</b>	<b>20</b>

## INTRODUCTION

This document is a type C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this standard.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

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## AUSTRALIAN STANDARD

**Agricultural tractor power take-offs**

## Part 4:

**Guards for power take-off (PTO) drive-shafts—Strength and wear tests and acceptance criteria****1 Scope**

This International Standard specifies laboratory tests for determining the strength and wear resistance of guards for power take-off (PTO) drive-shafts on tractors and machinery used in agriculture and forestry, and their acceptance criteria. It is intended to be used in combination with ISO 5673.

It is applicable to the testing of PTO drive-shaft guards and their restraining means. It is not applicable to the testing of guards designed and constructed to be used as steps.

**2 Normative references**

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 105-A02, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour*

ISO 500 (all parts), *Agricultural tractors — Rear-mounted power take-off types 1, 2 and 3*

ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance*

ISO 4892-2, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc sources*

ISO 5673-1, *Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 1: General, manufacturing and safety requirements*

ISO 5673-2, *Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 2: Specification for use of PTO drive shafts, and position and clearance of PTO drive line and PIC for various attachments*

**3 Terms and definitions**

For the purposes of this document, the terms and definitions given in ISO 5673-1 and the following apply.

**3.1****ambient temperature**

any temperature between 5 °C and 35 °C