

Australian Standard®

Agricultural tractor power take-offs

**Part 1: Rear-mounted power take-off
types 1, 2 and 3—General
specifications, safety requirements,
dimensions for master shield and
clearance zone**



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.

The following are represented on Committee ME-065:

- Department of Consumer & Employment Protection, WorkSafe Division (WA)
 - Department of Labour New Zealand
 - Department of Primary Industries and Fisheries Queensland
 - Federated Farmers of New Zealand
 - NSW Department of Primary Industries
 - National Farmers Federation
 - National Injury Prevention Advisory Council Standards Working Group
 - 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
-

This Standard was issued in draft form for comment as DR 07022.

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.

Keeping Standards up-to-date

Australian Standards® are living documents that reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued.

Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments that may have been published since the Standard was published.

Detailed information about Australian Standards, drafts, amendments and new projects can be found by visiting www.standards.org.au

Standards Australia welcomes suggestions for improvements, and encourages readers to notify us immediately of any apparent inaccuracies or ambiguities. Contact us via email at mail@standards.org.au, or write to Standards Australia, GPO Box 476, Sydney, NSW 2001.

Australian Standard[®]

Agricultural tractor power take-offs

Part 1: Rear-mounted power take-off types 1, 2 and 3—General specifications, safety requirements, dimensions for master shield and clearance zone

Originated as part of AS 1121—1971.
Previous edition part of AS 1121—1983.
Revised in part and redesignated as AS 1121.1—2007.

COPYRIGHT

© Standards Australia

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

Published by Standards Australia GPO Box 476, Sydney, NSW 2001, Australia
ISBN 0 7337 8323 6

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.

This Standard is Part 1 of a series of Parts dealing with the guarding of power take-offs (PTO), and power take-off shafts for agricultural tractors. Other Parts in the series are the following:

AS

- | | |
|--------|---|
| 1121 | Agricultural tractor power take-offs |
| 1121.2 | Part 2: Rear-mounted power take-off types 1, 2 and 3—Narrow-track tractors, dimensions for master shield and clearance zone |
| 1121.3 | Part 3: Rear-mounted power take-off types 1, 2 and 3—Main PTO dimensions and spline dimensions |
| 1121.4 | Part 4: Guards for power take-off (PTO) drive shafts—Strength and wear tests and acceptance criteria |

The objective of this Standard is to provide designers, manufacturers and suppliers of rear-mounted power take-offs with means for reducing the risks to the health and safety of those who must work with or near rear-mounted power take-offs.

This Standard is identical with and has been reproduced from ISO 500-1:2004 and ISO 500-1:2004/Cor.1:2005, *Agricultural tractors—Rear-mounted power take-off types 1, 2 and 3—Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone*.

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 ‘this part of ISO 500’ should read ‘this Australian Standard.’
- (c) A full point substitutes for a comma when referring to a decimal marker.

The text of this Standard includes Technical Corrigendum 1 to ISO 500-1:2004, which appears at the end of the original source text.

None of the normative references listed in Clause 2 have been adopted as Australian or Australian/New Zealand Standards.

AUSTRALIAN STANDARD

Agricultural tractor power take-offs

Part 1:

Rear-mounted power take-off types 1, 2 and 3—General specifications, safety requirements, dimensions for master shield and clearance zone

1 Scope

This part of ISO 500 gives general specifications, including speeds, safety requirements, the dimensions for the master shield and clearance zones for rear-mounted power take-offs (PTOs) of types 1, 2 and 3 on agricultural tractors with a track setting of more than 1 150 mm (those with a track setting width of 1 150 mm or less are covered in ISO 500-2).

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 5673-2, *Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 2: Specifications of PTO draft shaft, and PIC position and clearance for attachments*

ISO 6489 (all parts), *Agricultural vehicles — Mechanical connections on towing vehicles*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1**power take-off shaft****PTO**

external shaft on the rear of the tractor to provide rotational power to implements

4 Specifications

- 4.1 The tractor rear PTO is classified into three types (see Table 1).
- 4.2 The direction of PTO rotation shall be clockwise when viewed from behind the tractor.
- 4.3 The nominal PTO rated rotational frequency may be realized by one or more engine speed ranges.