

ANSI/ASABE AD5674:2004 SEP2015 (R2019)

Tractors and machinery for agricultural and forestry — Guards for power take-off (PTO) drive shafts — Strength and wear tests and acceptance criteria



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Agricultural and Biological Engineers**

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Tractors and machinery for agricultural and forestry — Guards for power take-off (PTO) drive shafts — Strength and wear tests and acceptance criteria

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Proposed by the Farm Equipment Council of the Equipment Manufacturers Institute; approved by the ASAE Safety Standards Subcommittee and the Power and Machinery Division Standards Committee; adopted by ASAE November 1995; reaffirmed December 1999, December 2001, February 2003, February 2004. Adoption with deviations of ISO 5674:2004 January 2005; reaffirmed January 2010; January 2015; revised to corrected ; July 2005 version of ISO 5674:2004 and renumbered from S522.1 to AD5674:2004 September 2015; reaffirmed December 2019.

Keywords: Drive shafts, Guards, Power take-off, Test

0 Foreword

0.1 ANSI/ASAE AD5674:2004 SEP2015, *Tractors and machinery for agricultural and forestry — Guards for power take-off (PTO) drive shafts — Strength and wear tests and acceptance criteria*, is an adoption with deviations of the identically titled ISO standard 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*. Deviations noted in the following Foreword sections pertain to those provisions where harmonization could not be achieved between ASABE and the International Standard.

Deviations from the subsequently printed international standard are noted with underscore (addition) or strikethrough (deletions) text. Deviations from the international standard figures and equations are clearly marked.

0.2 ANSI/ASAE AD5674:2004 SEP2015 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 ASAE S207 or more fully with AD5673-2. 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.

0.3 Eight normative references are listed in ISO 5674:2004. The responsible ASABE committee has reviewed these references and approved the following deviations.

0.3.1 Replace ISO 500-1, *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* with ANSI/ASABE AD500-1:2014, *Agricultural tractors — Rear-mounted power take-off types 1, 2, 3 and 4 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone*. Any reference to ISO 500-1 in the printed portion of ISO 5674:2004 shall be replaced by ANSI/ASABE AD500-1.

0.3.2 Replace ISO 5673-1:2005 *Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 1: General manufacturing and safety requirements* with ANSI/ASABE AD5673-

1:2005 SEP2014 *Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 1: General manufacturing and safety requirements*. Any reference to ISO 5673-1 in the printed portion of ISO 5674:2004 shall be replaced by ANSI/ASABE AD5673-1:2005.

0.3.3 Replace ISO 5673-2, *Agricultural tractors and machinery — Power take-off drive shafts and position of 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* with ANSI/ASABE AD5673-2:2005 SEP2014 *Agricultural tractors and machinery — Power take-off drive shafts and position of 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*. Any reference to ISO 5673-2 in the printed portion of ISO 5674:2004 shall be replaced by ANSI/ASABE AD5673-2:2005.

0.4 This standard has been approved as an American National Standard by ANSI (American National Standard Institute). ASAE S522 was used as the basis for the ISO 5674.

0.5 This standard deviates from ISO 5674:2004 as follows:

0.5.1 See section 0.3 for Normative reference deviations.

Text of ISO 5674:2004 *Tractors and machinery for agricultural and forestry — Guards for power take-off (PTO) drive shafts — Strength and wear tests and acceptance criteria*, follows.

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~~ [ANSI/ASABE AD5673](#).

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, with the exception of ISO 500-1 use ANSI/ASABE AD500-1, Agricultural tractors — Rear-mounted power take-off types 1, 2, 3 and 4 — Part 1: General specifications, safety requirements, dimensions for master shield and clearance zone*

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~~ [ANSI/ASABE AD5673-1:2005](#), *Agricultural tractors and machinery — Power take-off drive shafts and power-input connection — Part 1: General, manufacturing and safety requirements*

~~ISO 5673-2~~ [ANSI/ASABE AD5673-2:2005](#), *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*