ANSI/ASABE AD730:2009 W/Amd. 1:2014 MAR2015 (R2025)
Agricultural wheeled tractors — Rear-mounted three-point linkage — Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4

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History of ASAE S217, Three-Point Free-Link Attachment for Hitching Implements to Agricultural Wheel Tractors: Proposed by the Advisory Engineering Committee of the Farm and Industrial Equipment Institute: adopted by ASAE March 1959; revised 1961, 1962, 1963, June 1964, December 1966, March 1971, February 1972, April 1974, February 1975; revised editorially April 1977; reconfirmed December 1979, December 1984, December 1989; revised December 1991; reaffirmed December 1996, December 1997, December 1998; revised editorially March 1999; reaffirmed December 1999; January 2001; revised December 2001 to provide specific comparison to ISO 730-1:1994 E; reaffirmed January 2007.

S217 was used as the basis document for ISO 730, Agricultural wheeled tractors — Rear-mounted three-point linkage — Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4. S217.12 replaced by an adoption with deviations of ISO 730:2009 December 2012; approved as an American National Standard January 2013; ISO 730:2009 /Amd.1:2014 included to ISO 730:2009 adoption approved March 2015; approved by ANSI April 2015. Corrigendum 1 approved August 2019; reaffirmed December 2019, February 2025.

Keywords: Free-link, Hitch, Hitching implements, Three-point hitch

0 Foreword

0.1 ANSI/ASABE AD730:2009 W/Amd. 1:2014, Agricultural wheeled tractors — Rear-mounted three-point linkage — Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4, is an adoption of the identically title ISO documents ISO 730:2009, Agricultural wheeled tractors — Rear-mounted three-point linkage — Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4 and ISO 730:2009/Amd. 1:2014. Deviations noted in the following Foreword sections pertain to those provisions where harmonization could not be achieved between ASABE and the International Standard.

0.2 ANSI/ASABE AD730:2009 W/Amd. 1:2014 specifies the dimensions and requirements of the three-point linkage for the attachment of implements or equipment to the rear of agricultural wheeled tractors.

0.3 Three normative references are listed in ISO 730:2009 and ISO 730:2009/AMD. 1:2014. The responsible ASABE committee has reviewed these references and approved the following deviation:

0.3.1 Replace ISO 8759-1:1998, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage, with ANSI/ASABE AD8759-1:1998, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage. Any reference to ISO 8759-1:1998 in the printed portion of ISO 730:2009 shall be replaced by ANSI/ASABE AD8759-1:1998.

0.4 This standard has been approved as an American National standard by ANSI (American National Standard Institute). The original content of ISO 730 was based on ASAE S217.

0.5 This standard deviates from ISO 730:2009 and ISO 730:2009/AMD. 1:2014 as follows:

0.5.1 See Section 0.3 for Normative reference deviation.

0.5.2 In Table 3:change the value of the movement range for Category 1N from 610 mm to 420 mm.

0.5.3 In Table 2: L dimensions applied to 45 mm shaft also apply to 57.5 mm shaft.

Text of ISO 730:2009 and ISO 730:2009/AMD. 1:2014, Agricultural wheeled tractors — Rear-mounted three-point linkage — Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4, follows.

1 Scope

This International Standard specifies the dimensions and requirements of the three-point linkage for the attachment of implements or equipment to the rear of agricultural wheeled tractors.

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 789-1:1990, Agricultural tractors — Test procedures — Part 1: Power tests for power take-off

ISO 2332:2009, Agricultural tractors and machinery — Connection of implements via three-point linkage — Clearance zone around implement

ISO 8759-1:1998, Agricultural wheeled tractors — Front-mounted equipment — Part 1: Power take-off and three-point linkage

3 Terms and definitions

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

3.1 General

3.1.1

linkage

combination of one upper link and two lower links, each articulated to the tractor and the implement at opposite ends, in order to connect the implement to the tractor

3.1.2

hitch point

articulated connection between link and implement

NOTE: For geometrical purposes, the hitch point is the centre of the articulated connection between the link and the implement.

3.1.3

link point

articulated connection between link and tractor

NOTE: For geometrical purposes, the link point is the centre of the articulated connection between link and tractor.

3.1.4

three-point hitch coupler

device which facilitates the connection of the tractor three-point linkage to the implement

NOTE: For examples, see References [5] to [8].