ANSI/ASABE AD11001-1:2016 NOV2016
Agricultural wheeled tractors — Three-point hitch couplers — Part 1: U-frame coupler

American Society of Agricultural and Biological Engineers

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ANSI/ASAE S278 history: Proposed by Advisory Engineering Committee of Farm and Industrial Equipment Institute; approved by ASAE Power and Machinery Division Technical Committee; adopted by ASAE December 1964; revised December 1965, June 1967; reconfirmed December 1971; revised April 1974, February 1975; corrected editorially April 1977; revised December 1978, March 1980; reconfirmed December 1984; revised editorially and reconfirmed December 1989; reaffirmed December 1994; revised editorially February 1995; reaffirmed December 1999, January 2001, December 2001, February 2003. Adoption with modification of ISO 11001-1:1993 and addition of ASAE Foreword with deviations July 2003. Approved by ANSI September 2003; reaffirmed by ASABE February 2009; reaffirmed by ANSI May 2009; ASABE periodic review extended one year October 2013; ANSI periodic review extended to October 21, 2015 on April 21, 2014. Replaced by adoption with deviations of ISO 11001-1:2016 and approved by ANSI November 2016.

Keywords: Coupler, Hitch, Implements, Three-point, Tractors

0 Foreword

0.1 ANSI/ASABE AD11001-1:2016, Agricultural wheeled tractors — Three-point hitch couplers — Part 1: U-frame coupler, is an adoption with deviations of the identically titled ISO 11001-1:2016, Agricultural wheeled tractors — Three-point hitch couplers — Part 1: U-frame coupler. 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 This part of ISO 11001 specifies the essential dimensions for the attachment of three-point hitch implements to agricultural wheeled and track-laying tractors equipped with a three-point free link hitch according to ANSI/ASABE AD730:2009 W/Amd. 1:2014 or ANSI/ASABE AD8759-1:1998 and a U-frame hitch coupler.

NOTE In general the dimensions associated with the tractor and implement for use with hitch couplers are the same as those for the three-point linkage specified in ANSI/ASABE AD730:2009 W/Amd. 1:2014 or ANSI/ASABE AD8759-1:1998, and those for the clearance zone specified in ISO 2332.

The three-point hitch coupler systems constitute a special method of implement mounting. The hitch couplers are an additional component located between the three-point linkage and the implement, making it possible to hitch and unhitch from the operator's seat. Due to the special construction and function of hitch couplers, it can be necessary to vary the length of the upper and lower links indicated in the referenced standards.

This part of ISO 11001 applies to categories 1, 2N, 2, 3N, 3, 4N, and 4 of agricultural wheeled and tracklaying tractors as defined in ANSI/ASABE AD730:2009 W/Amd. 1:2014 or ANSI/ASABE AD8759-1:1998.

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0.3 Three normative references are listed in ISO 11001-1:2016. The responsible ASABE committee has reviewed these references and approved the following deviations.

0.3.1 Replace ISO 730, Agricultural wheeled tractors — Rear-mounted three-point linkage — Categories 1N, 1, 2N, 2, 3N, 3, 4N and 4, with 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. Any reference to ISO 730 in the printed portion of ISO 11001-1:2016 shall be replaced by ANSI/ASABE AD730:2009 W/Amd. 1:2014.

0.3.2 Replace ISO 8759-1, 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 in the printed portion of ISO 11001-1:2016 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 11001-1 was based on ASABE standard S278.

0.5 This standard deviates from ISO 11001-1:2016 as follows:

0.5.1 See Section 0.3 for Normative reference deviations.

0.5.2 Replace 4.8 with the following:

For tractors designed with U-frame couplers as standard equipment, the lower links should be shortened so that the distance to the lower U-frame coupler jaw falls within the range for dimension *L* specified in ANSI/ASABE AD730:2009 W/Amd. 1:2014. For tractors that offer U-frame couplers as an option, the lower links should be designed to the minimum *L* dimension given in ANSI/ASABE AD730:2009 W/Amd. 1:2014 as far as possible to minimize the distance that the combined lower link and U-frame coupler length is over the upper limit of the *L* dimension given in ANSI/ASABE AD730:2009 W/Amd. 1:2014.

NOTE For hitch Category 1, dimension B_1 in this part of ISO 11001 means the lower socket offset may be larger than the range allowed in ANSI/ASABE AD730:2009 W/Amd. 1:2014.

Text of ISO 11001-1:2016, Agricultural wheeled tractors — Three-point hitch couplers — Part 1: U-frame coupler, with deviations noted, follows.

1 Scope

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