

ASABE/ISO 21244:2008 JAN2011 (R2016)

Agricultural equipment — Mechanical connections between towed and towing vehicles — Implement hitch rings and attachment to tractor drawbars



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This standard was reviewed for adoption by the ASABE Power and Machinery Agricultural Machinery - Agricultural Tractor Technical subcommittee, and has been formerly approved by the Technical Committee. Adopted by ASABE and approved as an American National Standard January 2011; reaffirmed January 2016.

Keywords: Dimensions, Implement attachment, Mechanical connections, Tractor

0 Foreword

0.1 ASABE/ISO 21244:2008, Agricultural equipment — Mechanical connections between towed and towing vehicles — Implement hitch rings and attachment to tractor drawbars, is an adoption without modification of the identically titled ISO standard ISO 21244:2008(E), Mechanical connections between towed and towing vehicles — Implement hitch rings and attachment to tractor drawbars

0.2 ASABE/ISO 21244:2008 specifies dimensional requirements for the hitch rings of agricultural trailers and trailed implements designed to be attached to agricultural tractor drawbars of clevis type according to ISO 6489-3.

Note that ISO 6489-3 has been nationally adopted as ANSI/ ASABE AD6489-3:2004 (JUN2009).

0.3 One normative reference is listed in ISO 21244:2008(E). This reference has been reviewed and accepted as part of the adoption of ASABE/ISO 21244:2008.

0.4 This standard has been approved as an American National Standard by ANSI (American National Standards Institute).

Text of ISO 21244:2008, Agricultural equipment — Mechanical connections between towed and towing vehicles — Implement hitch rings and attachment to tractor drawbars, follows.

1 Scope

This International Standard specifies dimensional requirements for the hitch rings of agricultural trailers and trailed implements designed to be attached to agricultural tractor drawbars of clevis type according to ISO 6489-3.



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 6489-3:2004, *Agricultural vehicles — Mechanical connections between towed and towing vehicles — Part 3: Tractor drawbar*

3 Terms and definitions

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

3.1 angle of yaw

A

rotation around a vertical axis of the vehicle passing through the coupling point

3.2 angle of pitch

B

rotation around a horizontal axis passing through the coupling point and perpendicular to the longitudinal plane of symmetry of the vehicle

3.3 angle of roll

C

rotation around a horizontal axis passing through the coupling point and located in the plane of symmetry of the vehicle

4 Specifications

4.1 The hitch dimensions shall be in accordance with Figure 1 and Table 1, and Figure 2 and Table 2, and shall allow rotation as shown in Figure 3 and as specified in Table 3.

4.2 The dimensions relative to the standard specifications are divided into the six categories based on tractor PTO power as defined in ISO 6489-3.

NOTE: For information on hitch combinations, see Annex A.

4.3 Draft loads, PTO power according to ISO 6489-3:2004, Table 1, and the maximum static vertical load requirements of the towed agricultural implement shall dictate the hitch category, and whether a hitch ring (see Figure 1) or ball ring hitch (see Figure 2) is to be used.

A ball ring hitch may be used when a tighter connection between the tractor and implement is required.

4.4 The maximum static vertical load shall be determined in accordance with ISO 6489-3:2004, Table 5.

4.5 The hitch design shall be for connection to a clevis type drawbar only.