

ASABE/ISO 24347:2019 NOV2021 (R2024)

Agricultural vehicles — Mechanical connections between towed and towing vehicles — Dimensions of ball-type coupling device (80 mm)



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ASABE, 2950 Niles Road, St. Joseph, MI 49085-9659, USA, phone 269-429-0300, hq@asabe.org

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Agricultural vehicles — Mechanical connections between towed and towing vehicles — Dimensions of ball-type coupling device (80 mm)

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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 August 2009; adoption revised to adoption with deviations June 2014; reaffirmed and editorial revision December 2018; adopted 2019 version identically November 2021; reaffirmed December 2024.

Keywords: Dimensions, Location, Mechanical connections, Power take-off, Tractors

0 Foreword

0.1 ASABE/ISO 24347: 2019 NOV2021, Agricultural vehicles — Mechanical connections between towed and towing vehicles — Dimensions of ball-type coupling device (80 mm), is an adoption without modifications of the identically titled ISO standard ISO 24347:2019, Agricultural vehicles — Mechanical connections between towed and towing vehicles — Dimensions of ball-type coupling device (80 mm).

0.2 ASABE/ISO 24347 specifies the dimensional requirements and location for a ball coupling device of 80 mm nominal diameter, whose male part is fitted to an agricultural towing vehicle and female part is fitted to a towed, non-balanced vehicle provides mechanical connection between the two vehicles. It defines vertical loading for different positions.

This document specifies a ball coupling device with either a horizontal adjustable version, or a close position version.

0.3 Three normative references are listed in ISO 24347:2019. These references have been reviewed and accepted as part of the adoption of the ISO document in ASABE/ISO 24347:2019.

0.3.1 Please note that Normative Reference ISO 500-1, Farming 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, has been adopted by ASABE with deviations (ANSI/ASABE AD500-1:2014, Farming 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). The deviations within that adoption do not apply to the use of ISO 24347:2019.

0.3.2 Please note that Normative Reference ISO 500-2, Agricultural tractors — Rear-mounted power take-off types 1, 2 and 3 — Part 2: Narrow-track tractors, dimensions for master shield and clearance zone, has been adopted by ASABE with deviations (ANSI/ASABE AD500-2:2004, Farming tractors — Rear-mounted power take-off types 1, 2, and 3 — Part 2: Narrow-track tractors, dimensions for master shield and clearance zone). The deviations within that adoption do not apply to the use of ISO 24347:2019.

0.3.3 Please note that Normative Reference ISO 5673-2, 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, has been adopted by ASABE with deviations (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). The deviations within that adoption do not apply to the use of ISO 24347:2019.

0.4 This standard has been approved as an American National standard by ANSI (American National Standard Institute). The original content of ISO 24347 was not based on ASABE content or developed material. Royalty payments to ANSI are due upon all sales.

Text of ISO 24347:2019, Agricultural vehicles — Mechanical connections between towed and towing vehicles — Dimensions of ball-type coupling device (80 mm), follows.

1 Scope

This document specifies the dimensional requirements and location for a ball coupling device of 80 mm nominal diameter, whose male part is fitted to an agricultural towing vehicle and female part is fitted to a towed, non-balanced vehicle which provides mechanical connection between the two vehicles. It defines vertical loading for different positions.

This document specifies a ball coupling device with either a horizontal adjustable version, or a close position version.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 500-1, Farming 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 500-2, Agricultural tractors — Rear-mounted power take-off types 1, 2 and 3 — Part 2: Narrow-track tractors, dimensions for master shield and clearance zone

ISO 5673-2, 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

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <http://www.electropedia.org/>

3.1

upper location

ball coupling device location above the tractor PTO