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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 17127.1-2026

Replacing GB/T 17127.1-1998

**Agricultural wheeled tractors and implements - Three-point
hitch couplers - Part 1: U-frame coupler**

农业轮式拖拉机和机具 三点悬挂挂接器 第1部分：U型框架式挂接器

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is Part 1 of GB/T 17127 "Three-point suspension couplings for agricultural wheeled tractors and implements". GB/T 17127 has been...

The following sections have been published.

- Part 1: U-shaped frame hanger;
- Part 2: Type A Frame-Type Hanger;
- Part 4: Rod-type hangers.

This document replaces GB/T 17127.1-1998 "Three-point suspension couplings for agricultural wheeled tractors and implements - Part 1: U-shaped frames".

Compared with GB/T 17127.1-1998, the main technical changes in "Rack-mounted Connectors" are as follows, except for structural adjustments and editorial modifications.

- a) The scope of application has been changed (see Chapter 1, Chapter 1 of the 1998 edition);
- b) The dimensions of the connectors and related machine dimensions have been changed (see Tables 1 and 2, 1998 editions of Tables 1 and 2);
- c) The clearance range requirements for the tools have been changed (see 5.2, 6.5, and 4.2 and 5.5 in the 1998 edition);
- d) The positional dimensional requirements for the lower hook base and upper hook have been changed (see 5.5, 6.3, and 4.5, 5.3 of the 1998 edition);

- e) Added dimensional requirements for the shape and position of the connector (see 5.8);
- f) Added the requirement for U-frame hooks that can be converted to different hook categories (see 5.9);
- g) The requirements for the upper hook clearance have been changed (see 6.7, 5.7 of the 1998 edition).

This document is equivalent to ISO 11001-1:2016 "Three-point suspension couplings for agricultural wheeled tractors - Part 1: U-frame couplings".

Connector.

This document includes a new chapter on "Terms and Definitions".

The following minimal editorial changes have been made to this document.

---To harmonize with existing standards, the standard title has been changed to "Three-point suspension couplings for agricultural wheeled tractors and implements - Part 1.

U-shaped frame hanger.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Agricultural Machinery (SAC/TC201).

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Introduction

GB/T 17127 "Three-point suspension couplings for agricultural wheeled tractors and implements" aims to establish the three-point suspension system for agricultural wheeled tractors and implements.

The basic dimensions and connection method of the hanger are proposed to consist of 4 parts.

---Part 1: U-shaped frame hanger. The purpose is to improve the compatibility of U-shaped frame hangers with three-point suspension machines and specific machines.

Connection compatibility with a three-point suspension system.

---Part 2: Type A Frame Hanger. The purpose is to improve the compatibility of Type A frame hangers with three-point suspension machines and specific machines.

Connection compatibility with a three-point suspension system.

---Part 3: Linkage-type couplings. The purpose is to improve the compatibility of linkage-type couplings with three-point suspension implements and specific implements.

The compatibility of the connection of the hanging device.

---Part 4: Pole-type Connectors. The purpose is to improve the compatibility of pole-type connectors with three-point suspension implements and specific three-point suspension systems.

The matching of the settings.

Three-point suspension coupling for agricultural wheeled tractors and implements

1 Scope

This document specifies the three-point suspension implements and the three-point suspension movable connection devices conforming to ISO 730 or ISO 8759-1.

The basic dimensions of the connection between wheeled and tracked agricultural tractors and the basic dimensions of the U-shaped frame coupling.

Note: Generally, the dimensions of the tractor and implement connected by the coupling should conform to the three-point suspension system specified in ISO 730 or ISO 8759-1.

The relevant dimensions of the devices are the same, and the relevant dimensions of the clearance range are specified in ISO 2332.

The three-point suspension connector provides a special method for connecting machinery. The connector is located between the three-point suspension connection device and the machinery.

An auxiliary device is provided that allows the driver to engage and disengage the device while seated. Due to the special structure and function of the engagement device, it can it may be necessary to change the length of the upper and lower connecting rods in the referenced standard.

This document applies to agricultural wheeled and tracked vehicles in categories 1, 2N, 2, 3N, 3, 4N, and 4 as defined in ISO 730 or ISO 8759-1.

Three-point coupling device for tractors.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 20343-2016 Connection device for three-point suspension implements of agricultural tractors and machinery; clearance range around the implement.

(ISO 2332:2009, IDT) ISO 730 Rear-mounted three-point suspension for agricultural wheeled tractors, categories 1N, 1, 2N, 2, 3N, 3, 4N and 4 (Agricultural) Note. GB/T 1593-2015 Rear-mounted three-point suspension systems for agricultural wheeled tractors, categories 0, 1N, 1, 2N, 2, 3N, 3, 4N and 4 (ISO 730.

2009, MOD)

Note: GB/T 10916.1-2025 Agricultural Tractor Front-Loading Devices - Part 1: Safety Requirements and Clearance Range for Power Take-Off Shafts (ISO 8759-1) 2018, IDT)

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4 Principle of frame-type hanger

The frame-type attachment is a one-way implement attachment with a three-point suspension connection for the tractor (see ISO 730 and...).

ISO 8759-1) is adapted to U-frames and implements connected to U-frames. The tractor driver can engage and disengage the implements while seated.