

ICS 65.060.01

CCS B 90



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

GB/T 39521-2020

**Tractors and machinery for agriculture. Auto-guidance systems
for operator-controlled tractors and self-propelled machines.
Safety requirements**

Issued on: November 19, 2020

Implemented on: March 1, 2021

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

Table of Contents

Foreword

1 Scope

2 Normative references

Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this standard is equivalent to ISO 10975.2009 "Automatic guidance of agricultural tractors and mechanical tractors and self-propelled machinery"

Aviation System Safety Requirements."

The Chinese documents that have a consistent correspondence with the international documents cited in this standard are as follows.

---GB/T 9480-2001 Agricultural and forestry tractors and machinery, lawn and gardening power machinery manual compilation rules (eqv

ISO 3600.1996)

---GB 10395.1-2009 Agriculture and Forestry Machinery Safety Part 1.General (ISO 4254-1.2008, MOD)

---GB/T 19040-2016 steering requirements for agricultural tractors (ISO 10998.2008, MOD)

---GB 10396-2006 Agriculture and forestry tractors and machinery, lawn and garden power machinery safety signs and general rules of hazard graphics

(ISO 11684.1995,MOD)

---GB/T 20341-2016 agricultural tractor and self-propelled machinery operator control device control force, control direction, control

Location and method (ISO 15077.2008, IDT)

This standard was proposed by China Machinery Industry Federation.

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

Drafting organizations of this standard. Lovol Heavy Industry Co., Ltd., Chinese Academy of Agricultural Mechanization Science, Xingkedi Technology (Taizhou) Co., Ltd.

Division, Henan University of Science and Technology, Shandong Shifeng (Group) Co., Ltd.,

Zhejiang Modern Agricultural Equipment Design and Research Institute.

1 Scope

This standard specifies the safety requirements for automatic navigation systems used in agricultural tractors and self-propelled agricultural machinery.

This standard applies to tractors or self-propelled machinery manufacturers that install automatic navigation systems on their equipment, as well as those modified after the equipment leaves the factory.

Automatic navigation system.

This standard applies to navigation systems that require a vehicle-mounted driver to control the tractor or self-propelled machinery.

This standard does not specify the necessary requirements to ensure the integrity of the complex electronic control system in the automatic navigation system. These requirements involve complex

Miscellaneous electrical/electronic vehicle control systems are given in other standards.

When the requirements of this standard are different from the specific machine standards, the requirements of the specific machine standards take precedence over this standard.

This standard does not apply to tractors and self-propelled machinery with automatic navigation systems produced before the date of publication, nor does it apply

The auto-navigation system was fully installed and modified on the market before the release date.

Note. Specific road traffic regulations may impose additional requirements on automatic navigation systems.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

ISO 3600 Rules for Compiling Instructions for Agricultural and Forestry Tractors and Machinery, Lawn and Garden Power Machinery