



**International
Standard**

ISO 4009

**Commercial vehicles — Location
of electrical and pneumatic
connections between towing
vehicles and trailers**

*Véhicules utilitaires — Emplacement des connexions électriques
et pneumatiques entre véhicules tracteurs et véhicules remorqués*

**Fourth edition
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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 40, *Specific aspects for passenger cars, light and heavy commercial vehicles, special vehicles, buses and trailers/caravans*.

This fourth edition of ISO 4009 is a technical revision of ISO 4009:2000, which was withdrawn in 2017.

The main changes are as follows:

- multiple-vehicle combinations have been added to the scope;
- new connectors have been added in [Figure 1](#) to [Figure 4](#);
- the arrangement of the connectors has been changed in [Figure 1](#) to [Figure 4](#);
- general requirement for the length of flexible pipes has been added;
- the arrangement of the connectors has been added in a new [Annex A](#);
- editorial changes have been made.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Standardization requirements for the arrangement of electrical and pneumatic connections between towing vehicles and trailers are crucial to ensure seamless connectivity, operational safety, and the reliable functioning of vehicle combinations. As vehicle technology advances rapidly and an increasing variety of vehicles enter transportation market, more standardized requirements have been proposed for the arrangement of these connections. For instance, some vehicles allow the upper and lower mounting surfaces of connectors to be integrated into a single plane. Unifying the arrangement of connectors for drawbar-trailers and centre-axle trailers would further improve operational convenience. Some pipelines are installed at low positions, making them prone to ground contact and abrasion, so adding protective measures is beneficial for the pipelines. Additionally, incorporating schematic diagrams of connector layouts in this standard enhances its practicality.

Therefore, further ways to enhance the interchangeability between tractors and trailers, standardize the arrangement of connections, and ensure the safe operation of vehicle combinations must be explored.

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