



**NATIONAL STANDARD OF THE
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GB/T 41590.4-2022

**Road vehicles - Diagnostic communication over K-Line
(DoK-Line) - Part 4: Requirements for emission-related systems**

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Foreword

This Document was drafted as per the rules specified in GB/T 1.1-2020 Directives for Standardization - Part 1: Rules for the Structure and Drafting of Standardizing Documents. This Document was Part 4 of GB/T 41590 Road Vehicles - Diagnostic Communication over K-

Line (DoK-Line). GB/T 41590 has published the following parts:

- Part 1: Physical Layer;
- Part 2: Data Link Layer;
- Part 3: Application Layer;
- Part 4: Requirements for Emission-Related Systems.

This Document equivalently adopted ISO 14230-4:2000 Road Vehicles - Diagnostic Systems -

Keyword Protocol 2000 - Part 4: Requirements for Emission-Related Systems.

This Document adds a Clause of "Terms and Definitions".

This Document makes the minimum editorial modifications as follows:

- In order to coordinate with the existing standard, change the standard name into Road Vehicles - Diagnostic Communication over K-Line (DoK-Line) - Part 4: Requirements for Emission-Related Systems.

Please note some contents of this Document may involve patents. The issuing agency of

this

Document shall not assume the responsibility to identify these patents.

This Document was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This Document shall be under the jurisdiction of National Technical Committee of Auto Standardization (SAC/TC 114).

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1 Scope

This Document specifies the requirements for the K-Line-based diagnostic communication data

link and connected vehicle and scan tool when used to comply with on-board diagnostic (OBD)

requirements for emission-related test data.

This Document only specifies requirements relative to K-Line-based diagnostic communication

for OBD purposes. Complete K-Line-based diagnostic communication requirements can be found in ISO 14230 Parts 1 to 3 and in ISO 14229 (all parts). ISO 14230-1, ISO 14230-2 and

ISO 14230-3 are applicable for OBD purposes only as explicitly referenced in this Document.

2 Normative References

The provisions in following documents become the essential provisions of this Document through reference in this Document. For the dated documents, only the versions with the dates

indicated are applicable to this Document; for the undated documents, only the latest version

(including all the amendments) is applicable to this Document.

ISO 9141-2 Road Vehicles - Diagnostic Systems - Part 2: CARB requirements for Interchange of Digital information

ISO 14229 (all parts) Road Vehicles - Unified Diagnostic Services (UDS)

NOTE: GB/T 40822-2021 Road Vehicles - Unified Diagnostic Services (ISO 14229-1:2020, ISO

14229-2:2013, ISO 14229-3:2012, ISO 14229-4:2012, ISO 14229-5:2013, ISO 14229-6:2013, ISO

14229-7:2015, ISO 14229-8:2020, MOD)

ISO 14230-1 Road Vehicles - Diagnostic Communication over K-Line (DoK-Line) - Part 1: Physical Layer

NOTE: GB/T 41590.1-2022 Road Vehicles - Diagnostic Communication over K-Line (DoK-Line)

- Part 1: Physical Layer (ISO 14230-1:2012, IDT)

ISO 14230-2 Road Vehicles - Diagnostic Communication over K-Line (DoK-Line) - Part 2: Data Link Layer

NOTE: GB/T 41590.2-2022 Road Vehicles - Diagnostic Communication over K-Line (DoK-Line)

- Part 2: Data Link Layer (ISO 14230-2:2016, IDT)

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