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**NATIONAL STANDARD OF THE
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GB/T 44532-2024

**Internal combustion engines-Hybrid powertrain system-Safety
requirements**

内燃机 混合动力系统 安全要求

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting is required.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

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This document is under the jurisdiction of the National Technical Committee for Standardization of Internal Combustion Engines (SAC/TC 177).

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Internal combustion engine; Hybrid power system; Safety requirements

1 Scope

This document specifies the safety requirements for hybrid powertrains of internal combustion engines.

This document is applicable to internal combustion engine hybrid power systems consisting of internal combustion engines and electric motors, and is not applicable to internal combustion engines and hydraulic energy and other energy systems. hybrid system.

2 Normative references

GB/T 1147.1

GB 2894

GB/T 4208-2017

GB/T 4556

GB 14023

GB/T 18153

GB 18384-2020

GB/T 18488.1-2015

GB/T 18655-2018

GB/T 19596-2017

GB/T 20234.1-2023

GB/T 20651.1

GB/T 20651.2

GB/T 23821-2022

GB/T 37133-2018

GB 38031

3 Terms and definitions

The terms and definitions defined in GB/T 19596-2017 and GB 18384-2020 and the following apply to this document.

3.1 Hybrid powertrain system

It consists of an internal combustion engine, an electromechanical coupling device, a motor, a rechargeable energy storage system, a controller and related wiring harnesses, etc., and can provide two or more Energy powered system.

3.2 Runnable mode standby mode

A mode in which the system operates normally when the accelerator pedal is depressed (or a control device is activated) or the brake pedal is released.