International Standard

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Manually portable (hand-held) powered lawn and garden equipment and forest machinery — Engine performance and fuel consumption

Matériel pour jardins et pelouses et matériel forestier portatifs à main à moteur — Performance du moteur et consommation de carburant

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Foreword

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This document was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 17, *Manually portable (hand-held) powered lawn and garden equipment and forest machinery*.

This first edition of ISO 20599 cancels and replaces ISO 7293:2021 and ISO 8893:2021, which have been technically revised.

The main changes are as follows:

— the requirements have been combined into a single International Standard.

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Manually portable (hand-held) powered lawn and garden equipment and forest machinery — Engine performance and fuel consumption

1 Scope

This document specifies a method for testing the performance and fuel consumption of internal combustion engines used to power manually portable (hand-held) powered lawn and garden equipment and forest machinery, for example, chain-saws, hedge trimmers, brush-cutters, grass-trimmers, pole-mounted pruners, and edgers.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 6531, *Machinery for forestry — Portable chain-saws — Vocabulary*

ISO 7112, *Machinery for forestry — Portable brush-cutters and grass-trimmers — Vocabulary*

ISO 5163, *Petroleum products — Determination of knock characteristics of motor and aviation fuels — Motor method*

ISO 5164, *Petroleum products — Determination of knock characteristics of motor fuels — Research method*

ISO 10517, *Powered hand-held hedge trimmers — Safety*

ISO 11680-1, *Machinery for forestry — Safety requirements and testing for pole-mounted powered pruners — Part 1: Machines fitted with an integral combustion engine*

ISO 11681-1, *Machinery for forestry — Portable chain-saw safety requirements and testing — Part 1: Chain-saws for forest service*

ISO 11789, *Powered edgers with rigid cutting means — Definitions, safety requirements and test procedures*

ISO 11806-1, *Agricultural and forestry machinery — Safety requirements and testing for portable, hand-held, powered brush-cutters and grass-trimmers — Part 1: Machines fitted with an integral combustion engine*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6531, ISO 7112, ISO 10517, ISO 11680-1, ISO 11681-1, ISO 11789 and ISO 11806-1 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

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