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Agricultural and forestry machinery - Safety requirements and testing for portable, hand-held, powered brush-cutters and grass-trimmers - Part 2: Machines for use with back-pack power unit (ISO 11806-2:2011)



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

See Eesti standard EVS-EN ISO 11806-2:2011 sisaldab Euroopa standardi EN ISO 11806-2:2011 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 11806-2:2011 consists of the English text of the European standard EN ISO 11806-2:2011.	
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.	
·	Date of Availability of the European standard is 01.12.2011.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.	

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## **EUROPEAN STANDARD**

## **EN ISO 11806-2**

# NORME EUROPÉENNE EUROPÄISCHE NORM

December 2011

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#### **English Version**

Agricultural and forestry machinery - Safety requirements and testing for portable, hand-held, powered brush-cutters and grass-trimmers - Part 2: Machines for use with back-pack power unit (ISO 11806-2:2011)

Matériel agricole et forestier - Exigences de sécurité et essais pour débroussailleuses et coupe-herbe portatifs à moteur - Partie 2: Machines pour utilisation avec source motrice portée à dos (ISO 11806-2:2011)

Land- und forstwirtschaftliche Maschinen -Sicherheitstechnische Anforderungen und Prüfung für tragbare handgehaltene motorbetriebene Freischneider und Grastrimmer - Teil 2: Geräte für den Gebrauch mit rückentragbarer Antriebseinheit (ISO 11806-2:2011)

This European Standard was approved by CEN on 30 November 2011.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

#### **Foreword**

This document (EN ISO 11806-2:2011) has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" in collaboration with Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2012, and conflicting national standards shall be withdrawn at the latest by June 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

#### **Endorsement notice**

The text of ISO 11806-2:2011 has been approved by CEN as a EN ISO 11806-2:2011 without any modification.

# Annex ZA (informative)

# Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC on machinery.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

U Dire. WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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#### Introduction

This document is a type-C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the scope of this document.

s of t. quirement whites that h. When requirements of this type-C standard are different from those which are stated in type-A or type-B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

# Agricultural and forestry machinery — Safety requirements and testing for portable, hand-held, powered brush-cutters and grass-trimmers —

### Part 2:

## Machines for use with back-pack power unit

#### 1 Scope

This part of ISO 11806 gives safety requirements and measures for their verification for the design and construction of portable, hand-held, powered brush-cutters and grass-trimmers with a back-pack-mounted combustion engine power source and mechanical power transmission between the power source and the cutting attachment. Methods for the elimination or reduction of hazards arising from the use of these machines and the type of information on safe working practices to be provided by the manufacturer are specified.

This part of ISO 11806, taken together with the relevant clauses of ISO 11806-1 (see 4.1), deals with all significant hazards, hazardous situations and hazardous events, with the exception of whole-body vibration from the back-pack power unit, relevant to these machines when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

NOTE 1 A standardized test procedure for measuring whole-body vibration from the back-pack power unit is presently not available.

NOTE 2 See Annex A, together with Annex A in ISO 11806-1:2011, for a list of significant hazards.

This part of ISO 11806 is applicable to portable, hand-held, powered brush-cutters and grass-trimmers manufactured after its date of publication.

This part of ISO 11806 is not applicable to machines equipped with metallic cutting attachments consisting of more than one piece, e.g. pivoting chains or flail blades.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 4413:2010, Hydraulic fluid power — General rules and safety requirements for systems and their components

ISO 4414:2010, Pneumatic fluid power — General rules and safety requirements for systems and their components

ISO 11806-1: 2011, Agricultural and forestry machinery — Safety requirements and testing for portable, handheld, powered brush-cutters and grass-trimmers — Part 1: Machines fitted with an integral combustion engine

ISO 12100:2010, Safety of machinery — General principles for design — Risk assessment and risk reduction

ISO 13857:2008, Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs

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