

Compliance Guide
4th edition 10/2020

Tillers

Motor hoes

(combustion engine powered)

This guide is intended to help market surveillance authorities with the checking of conformity of combustion engine powered brush-cutters and grass trimmers in the European Union. It should only be taken as suggestions or observations for consideration

European Garden Machinery Federation

EGMF

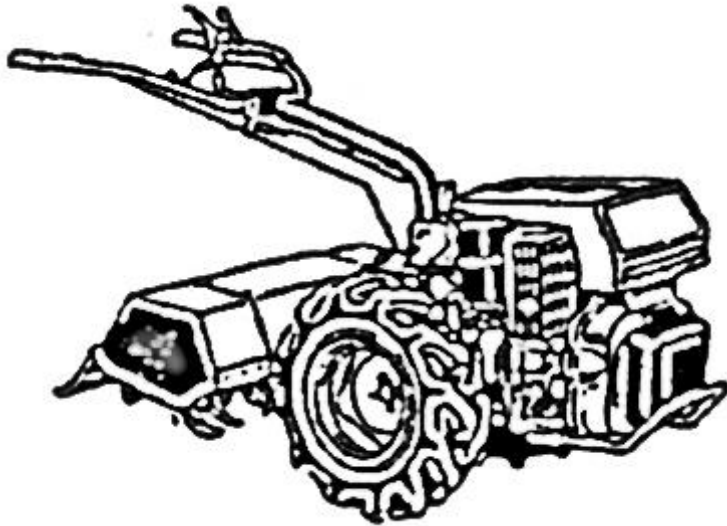
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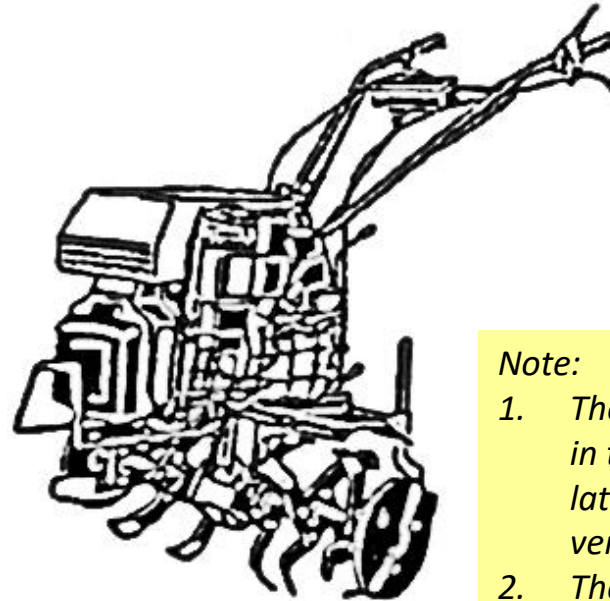
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1. Introduction

Pedestrian controlled tractor with mounted rotary cultivator and motor hoe in accordance with EN 709:1997+A4:2009/AC:2012 (tillers)



Pedestrian controlled tractor with mounted rotary cultivator (tiller)



Motor hoe

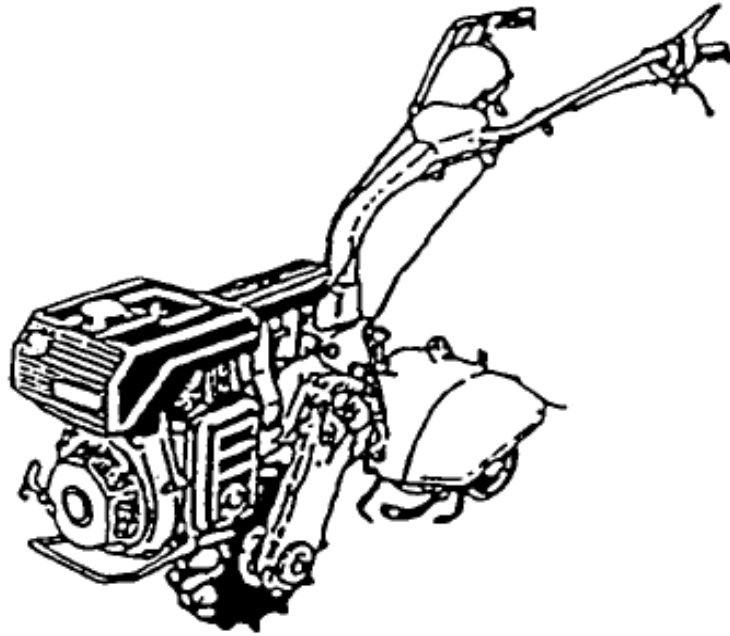
Note:

- 1. The standards indicated in this guide are the latest published versions.*
- 2. The inspection of a product should be conducted using ONLY the standards as declared by the manufacturer in the D.o.C. delivered with the product.*

1. Introduction

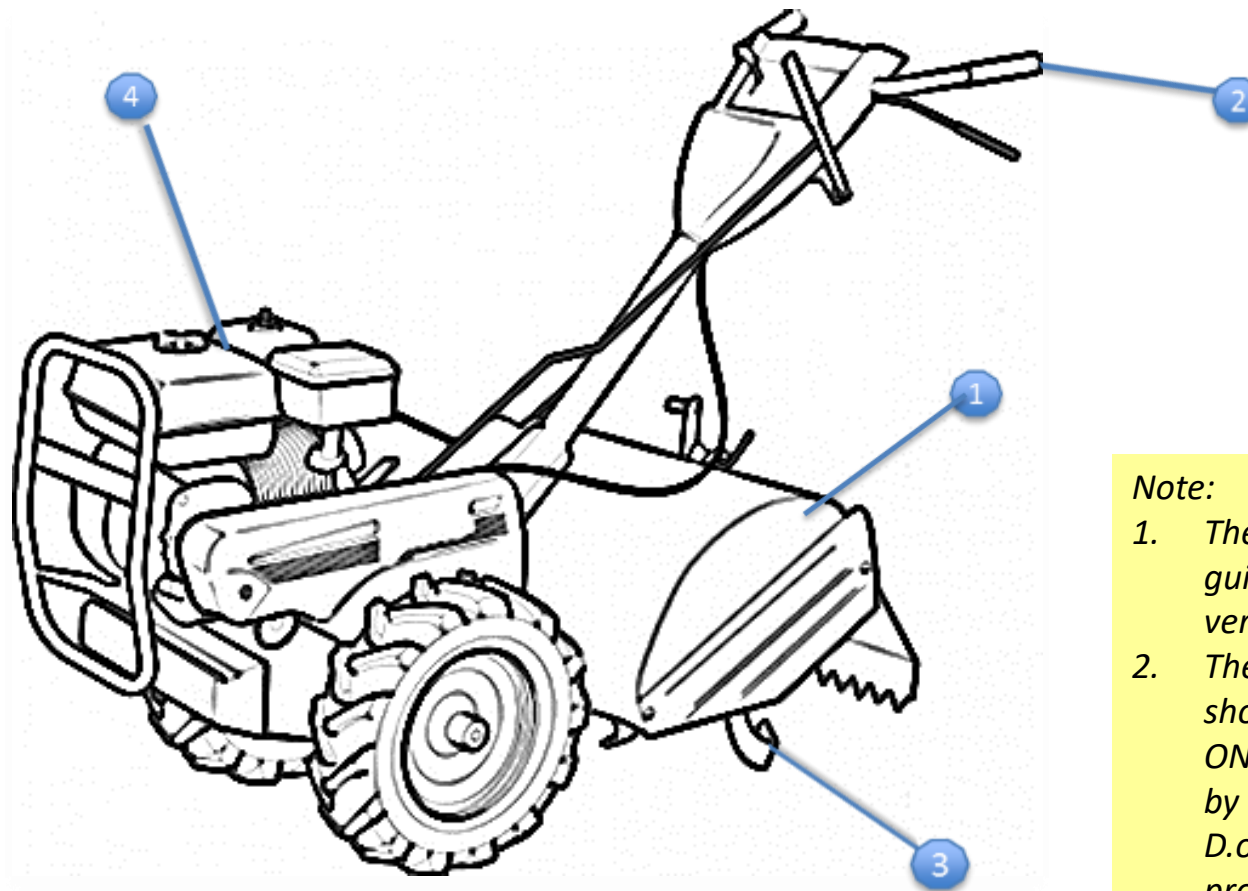


Motor hoe



Motor hoe with drive wheel

1. Introduction



Key

- 1) Guard
- 2) Handles
- 3) Working tools
- 4) Engine

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Description of essential components of a pedestrian controlled tiller

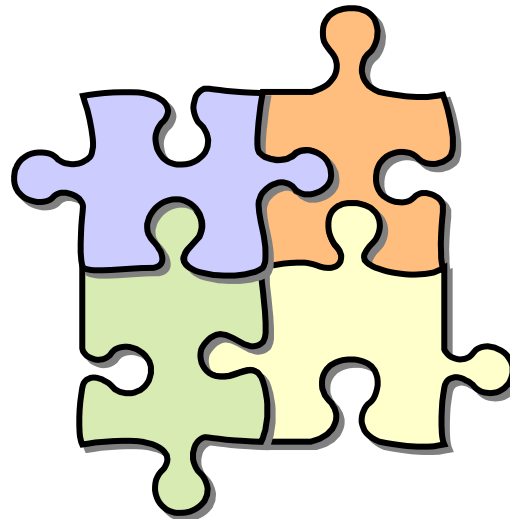
1. Introduction

Main EU technical Directives / Regulations to be applied combustion engine powered pedestrian controlled tractors, with mounted rotary cultivator, motor hoes and motor hoes with drive wheels

Directive 97/68/EC repealed
01.01.2017

Regulation (EU) 2016/1628
Exhaust Emissions plus
supplementary acts

Directive 2011/65/EU
(as amended) *
Restriction of Hazardous
Substances (RoHS)



Directive 2006/42/EC
Machinery

Directive 2000/14/EC
(as amended)
Outdoor Noise

Directive 2014/30/EU
Electromagnetic Compatibility

* Tiller / motor hoe with compression-ignition engine and recoil starter that could not need electricity for starting are out of the scope of RoHS Directive.

1. Introduction

Is this tiller or motor hoe compliant with EU Directives?

- ✓ • This guide is intended for quick evaluation of combustion engine powered pedestrian controlled lawnmower marking:
 - CE marking
 - Engine exhaust emission marking (EC type approval number)
 - Guaranteed sound power level **only for motor hoes with an engine power of less than 3 kW**

- ✓ • Documentation:
 - EU declaration of conformity
 - Instructions

- ✗ • This guide is not applicable for technical evaluations
- ✗ • This guide is not applicable to **electric motor hoes**
- ✗ • This guide contains extracts of relevant regulations and does not claim completeness of contents

2. Machinery Identification / CE Marking

Machinery Directive 2006/42/EC

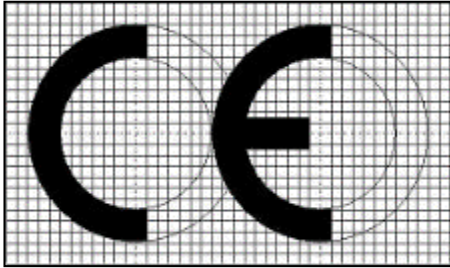


Illustration from 2006/42/EC

CE marking:

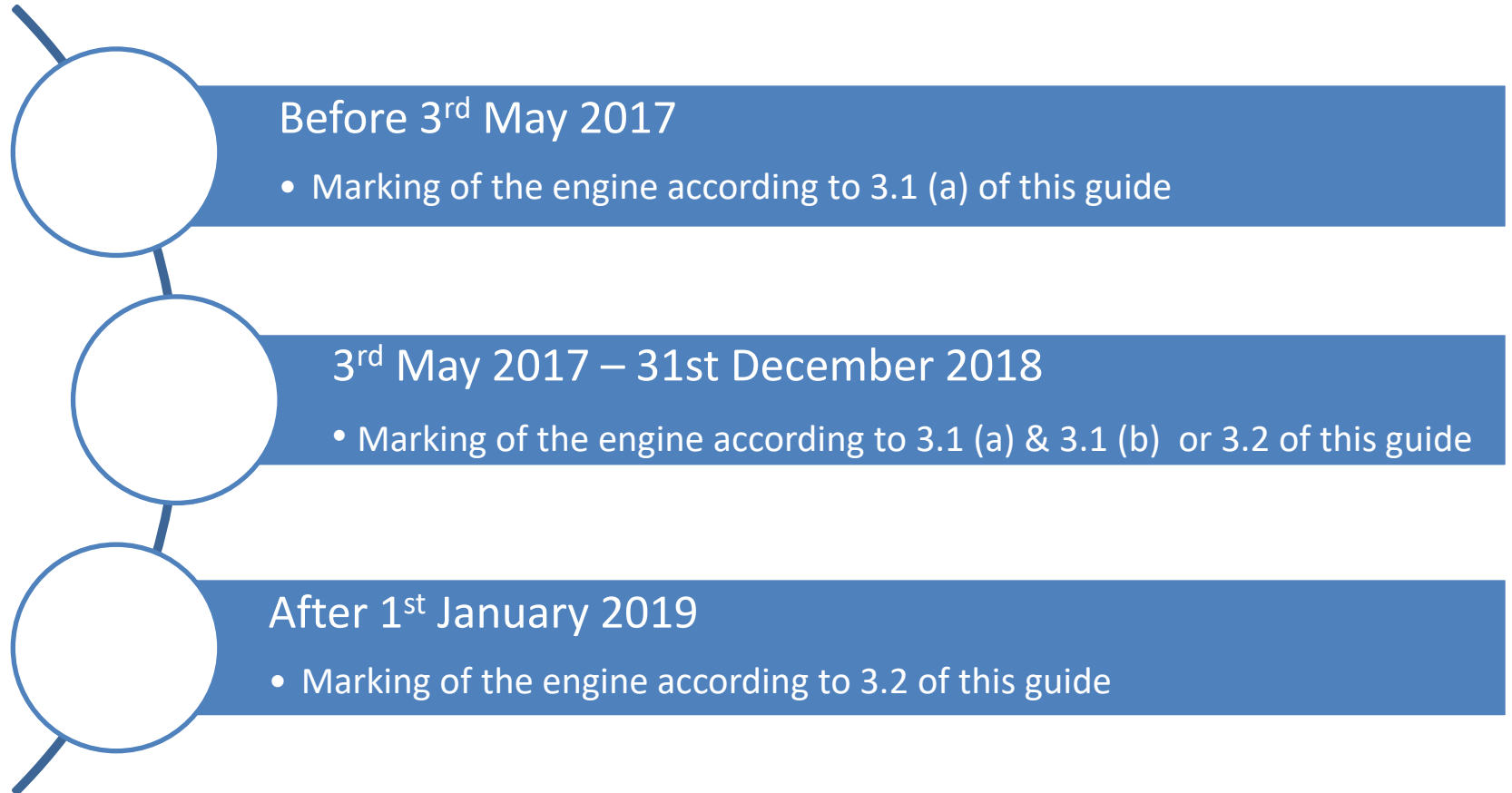
- The CE Conformity marking shall consist of the initials 'CE' as shown left;
- The CE marking shall be affixed to the machinery visibly, legibly and indelibly;
- The CE marking must contain the minimum particulars (on the machine e.g. labelled, printed, embossed, etc.);
- The CE marking must be affixed in the immediate vicinity of the name of the manufacturer or his authorised representative, using the same technique.

Marking of machinery:

- Business name and address of the manufacturer or his authorised representative;
- Designation of the machinery (may be indicated by a code);
- Designation of series or type (may be indicated by a code and may be combined with the designation of the machinery);
- Serial number, if any;
- Year of construction/assembly;
- Nominal rated power, in kW;
- Mass of the machine in its standard version, in kg.

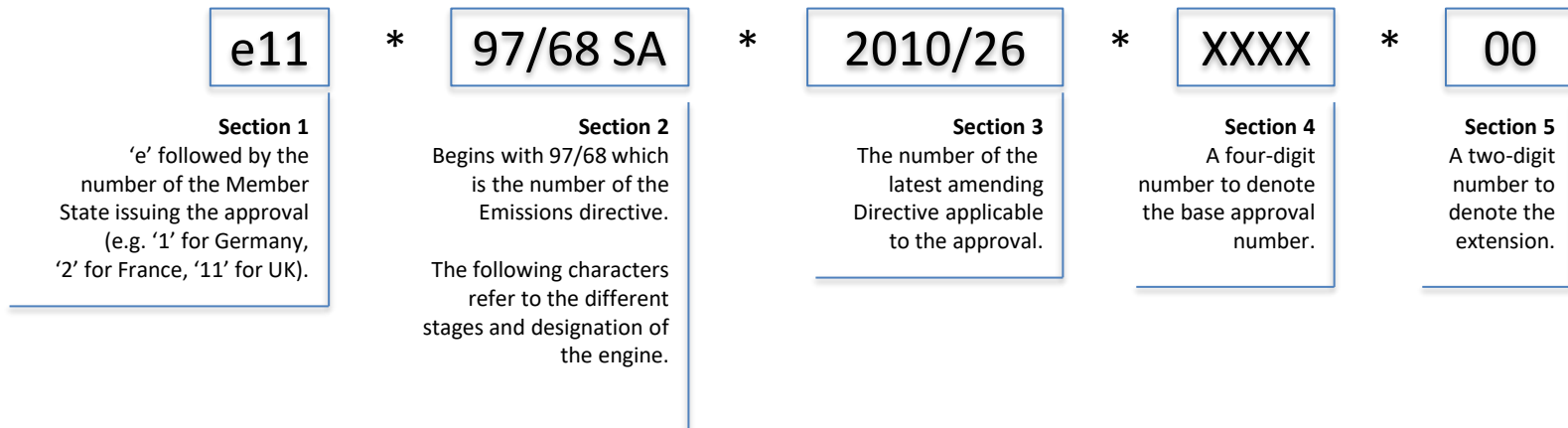
3. Exhaust Emission Marking

According to the manufacturing date of the engine:



3.1(a) Engine Marking / EC Type Approval

- Until 31.12.18 engines that are in conformity with Directive 97/68/EC may continue to be produced and shall be marked with the EC Type Approval number according to the format below
- The EC type-approval number must be durable for the useful life of the engine and must be clearly legible and indelible
- The marking must be located so as to be readily visible to the average person after the engine has been completed with all the auxiliaries necessary for engine operation
- The number must consist of five sections separated by the ‘*’ character
- Example:

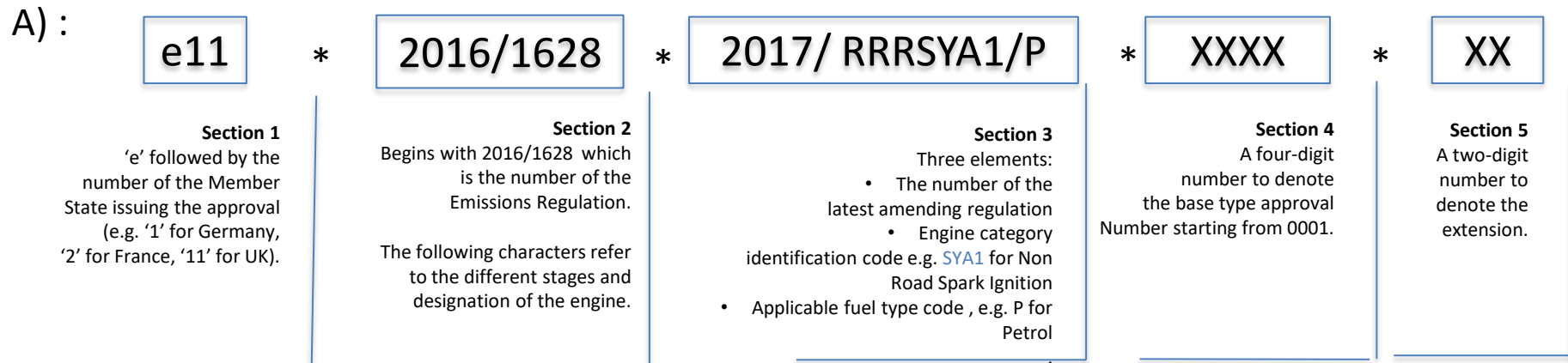


3.1(b) Transition Scheme – Reg. (EU) 2016/1628

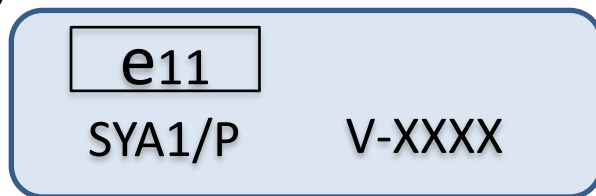
- Transition scheme allows, during a transition period, the placing on the EU market of engines produced prior to the applicable Stage V placing on the market date. These engines are called transition engines.
- ‘transition period’ means the first 24 months following the dates set out in Annex III for the placing on the market of Stage V engines.
- The applicable dates are:
 - 31st December 2018: End of production of Transition engines.
 - 30th June 2021: Last date of production for machines incorporating Transition engines.
 - 31st December 2021: End of placing on the market of machines incorporating Transition engines.
- For the transition engine, marking shall additionally include the engine production date in month and year (e.g. MM/YYYY), this marking may be a separate mark. For a machine incorporating a transition engine, the machine production date in month and year (e.g. MM/YYYY) can be used instead of the engine production date.

3.2 Engine Marking / EC Type Approval

- From 01.01.2019, engines shall be in conformity with Regulation (EU) 2016/1628 and be marked with the EC Type Approval number according to the format below, either by the certificate number A) or by a simplified mark B)
- Example for a motor hoe petrol engine of variable speed and between 80 & 225 cc, the engine category is NRS and sub-category is NRS-vi-1a so the coding is SYA1.



B) :



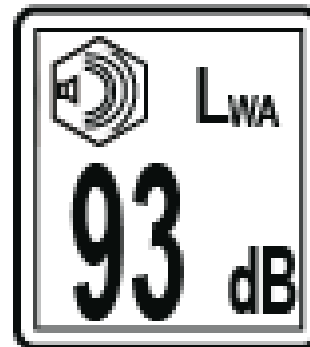
3.2 Engine Marking / EC Type Approval

- The engine marking shall include the engine production date in month and year (e.g. MM/YYYY)
 - For engine categories NRSh and NRS (excluding sub-categories NRS-v-2b and NRS-v-3), where engine and machine are fully integrated and cannot be identified as separate components, it is permitted to use the machine production date.

4. Marking / Outdoor Noise Label

Outdoor Noise Directive 2000/14/EC (as amended)

- The indication of the guaranteed sound power level **ONLY** for motor hoes with a nominal power of less than 3 kW must consist of:
 - the single number of the guaranteed sound power in dB
 - the sign L_{WA} and
 - a pictogram taking the following form:



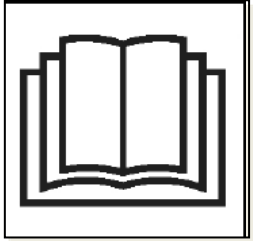
example

- Noise limit for motor hoes with a nominal power of less than 3 kW: 93 dB(A)
- Motor hoes with a nominal power equal to or greater than 3kW are out of the scope of the Outdoor Noise Directive 2000/14/EC

5. Documentation / Instructions

Machinery Directive 2006/42/EC

For clarification, consult the European Commission Guide to application of the Machinery Directive 2006/42/EC



- Machinery must be accompanied by instructions in the official Community language(s) of the Member State in which it is made available
- The instructions must contain at least the following information:
 - business name and full address of the manufacturer and of his authorised representative (if the manufacturer is not located in an EU Member State);
 - descriptions and explanations necessary for safe use, adjustment and maintenance operations that should be carried out by the user, and the preventive maintenance measures that should be taken;
 - a description of the intended use of the machinery (professional use and use by consumers);
 - warnings concerning ways in which the machinery must not be used that experience has shown might occur;
 - Noise emissions and hand-arm vibrations.

6. Documentation / EU Declaration of Conformity

2006/42/EC, 2000/14/EC, 2014/30/EU, 2011/65/EU

For clarification, consult the European Commission Guide to application of the Machinery Directive 2006/42/EC



The EU declaration of conformity must contain at least the following particulars:

- business name and full address of the manufacturer and, where appropriate, his authorised representative;
- name and address of the person authorised to compile the technical file, who must be established in the European Union;
- description and identification of the machinery including generic denomination, function, model, type, serial number and commercial name;
- a sentence expressly declaring that the machinery fulfils all the relevant provisions of this Directive and, where appropriate, a similar sentence declaring conformity with other Directives and/or relevant provisions with which the machinery complies;
- For motor hoes below 3 kW:
 - the name and address of the Notified Body which carried out the conformity assessment in accordance with the Outdoor Noise Directive 2000/14/EC;
 - the guaranteed and measured sound power level in accordance with the Outdoor Noise Directive 2000/14/EC;
- the place and date of the declaration;
- the identity and signature of the person empowered to draw up the declaration on behalf of the manufacturer or his authorised representative.

7. Warning Text or Pictograms on the Machine*

- Read instructions

- Warning label for rotating working tool must be affixed



alternatives

- * If pictograms are used, they must be explained in the instructions
- * If text is used it must be in the official language(s) of the country where the product is sold