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.
1. Introduction

**Brush-cutter and grass trimmer in conformity with EN ISO 11806-1:2011**

![Diagram of brush-cutter and grass trimmer](image)

**Key**

1) Throttle trigger lockout  
2) Stop switch  
3) Suspension point  
4) Handle  
5) Throttle trigger  
6) Drive shaft tube  
7) Cutting attachment guard  
8) Cutting attachment  
9) Power unit

**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

Main EU technical Directives & Regulations to be applied to brush-cutters and grass trimmers

- Directive 2006/42/EC - Machinery
- Directive 2000/14/EC (as amended) - Outdoor Noise
- Directive 2014/30/EU - Electromagnetic Compatibility
- Directive 97/68/EC - repealed
  01.01.2017
- Regulation (EU) 2016/1628 - Exhaust Emissions plus supplementary acts
1. Introduction

Is this brush-cutter or grass trimmer compliant with EU Directives?

- This guide is for quick evaluation of combustion engine powered brush-cutter and grass trimmer marking:
  - CE marking
  - Engine exhaust emission marking (EC type approval number)
  - Guaranteed sound power level

- And documentation:
  - EU declaration of conformity
  - Instructions

- This guide is not applicable for technical evaluations
- This guide is not applicable to electric lawn-trimmers
- This guide contains extracts of relevant regulations and does not claim completeness of contents
2. Machinery Identification / CE Marking

Machinery Directive 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.
3. Exhaust Emission Marking

According to the manufacturing date of the engine:

- **Before 3\(^{rd}\) May 2017**
  - Marking of the engine according to 3.1 (a)

- **3\(^{rd}\) May 2017 – 31st December 2018**
  - Marking of the engine according to 3.1 (a) & 3.1 (b) or 3.2

- **After 1\(^{st}\) January 2019**
  - Marking of the engine according to 3.2
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:

```
Section 1
‘e’ followed by the number of the Member State issuing the approval (e.g. ‘1’ for Germany, ‘2’ for France, ‘11’ for UK).

Section 2
Begins with 97/68 which is the number of the Emissions directive. The following characters refer to the different stages and designation of the engine.

Section 3
The number of the latest amending Directive applicable to the approval.

Section 4
A four-digit number to denote the base approval number.

Section 5
A two-digit number to denote the extension.
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- Example:

```
e11 * 97/68 SA * 2010/26 * XXXX * 00
```
• 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 2020: Last date of production for machines incorporating Transition engines.
  • 31st December, 2020: 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 hand-held petrol engine below 50 cc, the engine category is NRSh and subcategory is NRSh-v-1a so the coding is SHA1

A) :

<table>
<thead>
<tr>
<th>Section 1</th>
<th>Section 2</th>
<th>Section 3</th>
<th>Section 4</th>
<th>Section 5</th>
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</table>
| 'e' followed by the number of the Member State issuing the approval (e.g. ‘1’ for Germany, ‘2’ for France, ‘11’ for UK). | Begins with 2016/1628 which is the number of the Emissions Regulation. The following characters refer to the different stages and designation of the engine. | Three elements: 
  - The number of the latest amending regulation 
  - Engine category identification code e.g. SHA1 for Non Road Spark Ignition 
  - Applicable fuel type code, e.g. P for Petrol | A four-digit number to denote the base type approval Number starting from 0001. | A two-digit number to denote the extension. |

B) :

| e11 | SHA1/P | V-XXXX |
4. Marking / Outdoor Noise Label

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

- The indication of the guaranteed sound power level 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](image)

- There are no noise limits for brush-cutters and grass trimmers but noise marking and declaration of the values in the instruction handbook are required.
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;
  - hand-arm vibrations.
For clarification, consult the European Commission Guide to application of the Machinery Directive 2006/42/EC

The EU declaration of conformity (D.o.C.) 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;
- 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*

- Beware of thrown objects
- Keep bystanders at a distance (minimum 15m)
- Beware of kick back effect

- Wear protective goggles, a helmet (if necessary) and ear protection
- Wear slip resistant gloves
- Wear slip resistant footwear

* 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