

**Compliance Guide
4th Edition 10/2020**

Ride-on lawnmowers (combustion engine powered)

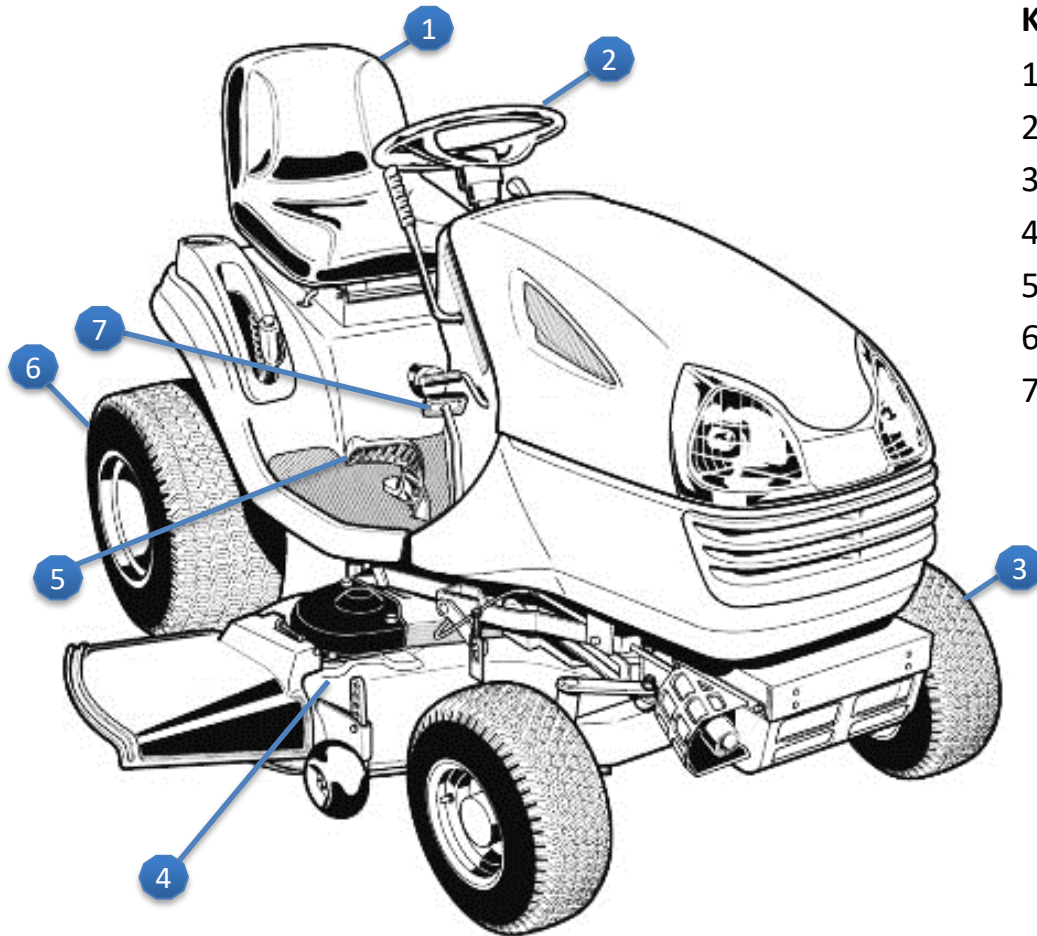
This guide is intended to help market surveillance authorities with the checking of conformity of combustion engine powered brush-cutters and grass trimmers in the European Union. It should only be taken as suggestions or observations for consideration

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

1. Introduction

Ride-on lawnmower, with mid-mounted cutting means assembly in conformity with EN ISO 5395-1:2013/A1:2018 & EN ISO 5395-3:2013/A2:2018



Key

- 1) Seat with Operator Presence Control (OPC)
- 2) Steering wheel
- 3) Front wheel assembly
- 4) Cutting means assembly
- 5) Speed control pedal
- 6) Rear wheel assembly
- 7) Brake pedal

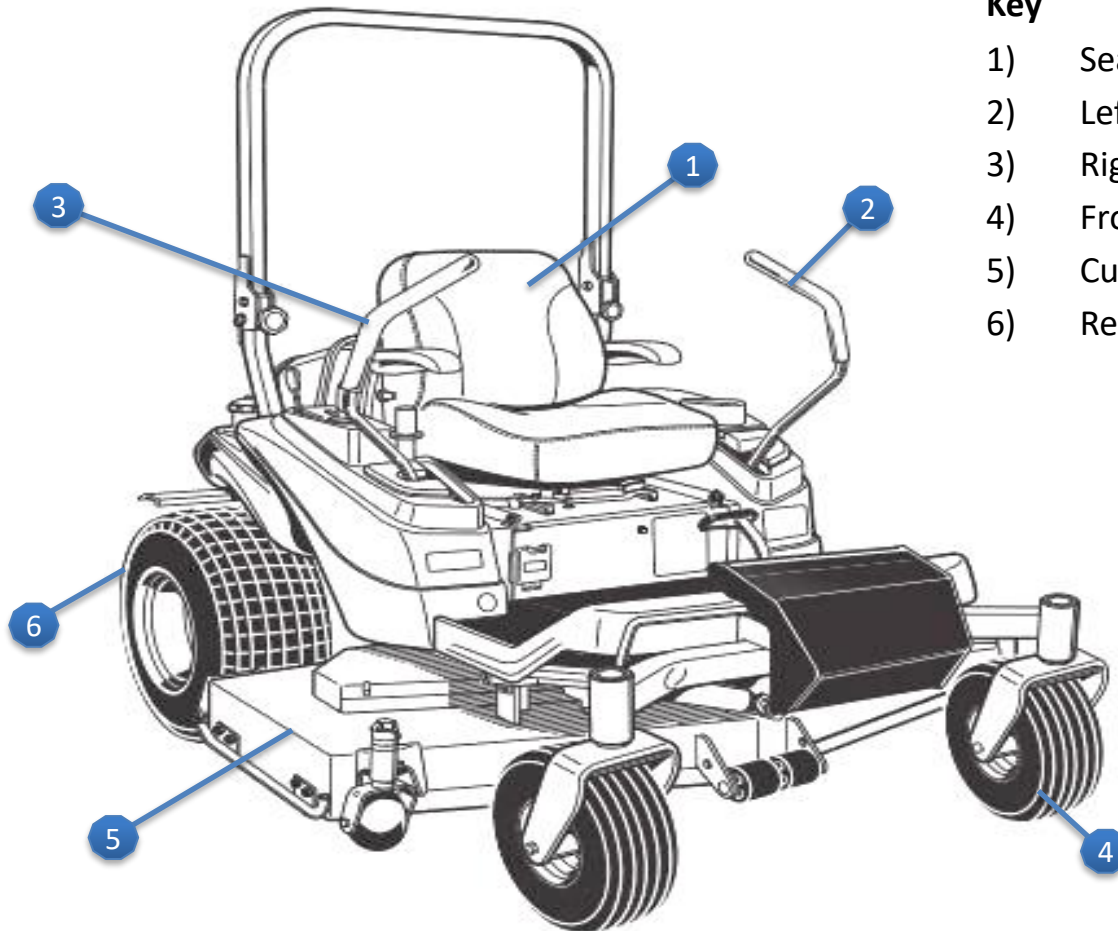
Note:

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.
3. A **Roll-Over Protective Structure (ROPS)** is required for machines above 400 kg unladen weight

Designed for use by one seated operator

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- 2) Left Hand motion control lever
- 3) Right Hand motion control lever
- 4) Front wheel assembly
- 5) Cutting means assembly
- 6) Rear wheel assembly

Note 1: These machines are known as Zero Turning Radius "ZTR".

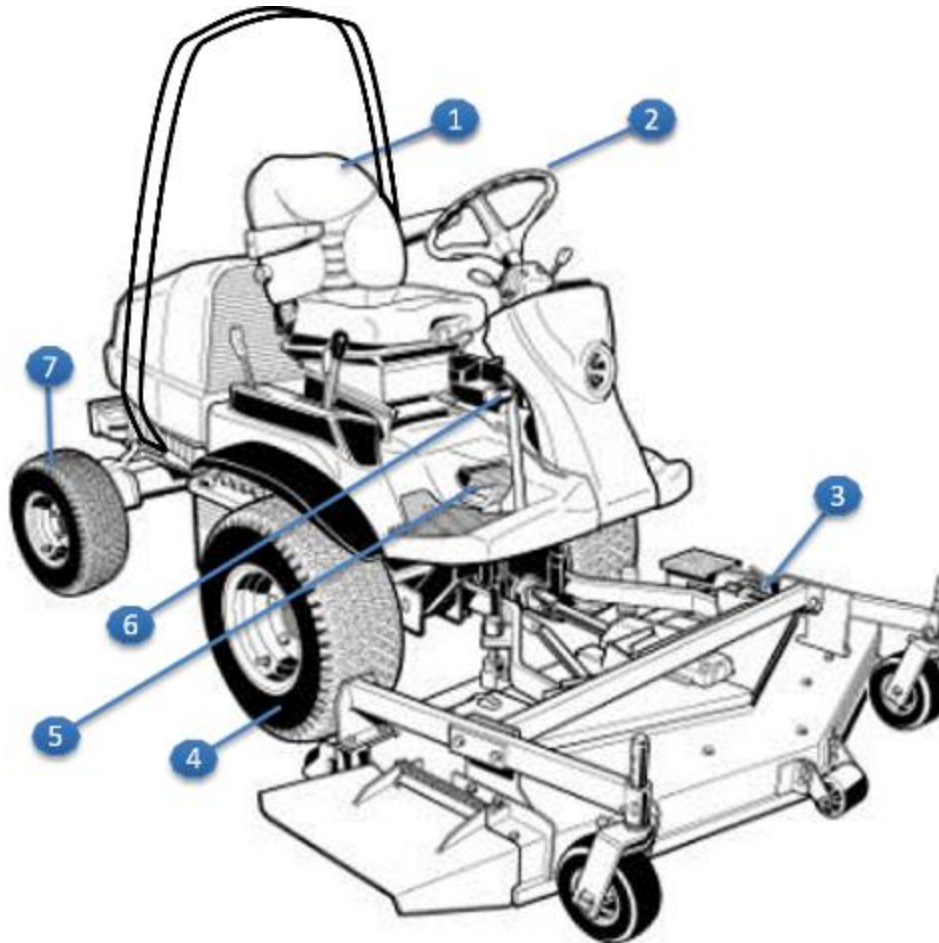
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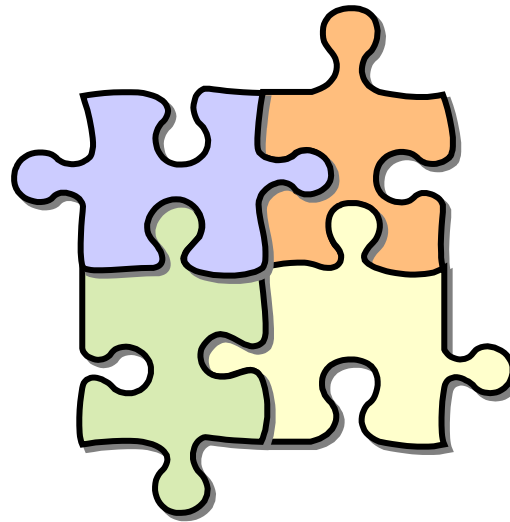
1. Introduction

Main EU technical Directives / Regulations to be applied to combustion engine powered ride-on lawnmowers

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

1. Introduction

Is this ride-on lawnmower compliant with EU Directives?

- ✓ • This guide is intended for quick evaluation of combustion engine powered ride-on lawnmower marking:
 - CE marking
 - Engine exhaust emission marking (EC type approval number)
 - Guaranteed sound power level

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

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

2. Machinery Identification / CE Marking

Machinery Directive 2006/42/EC

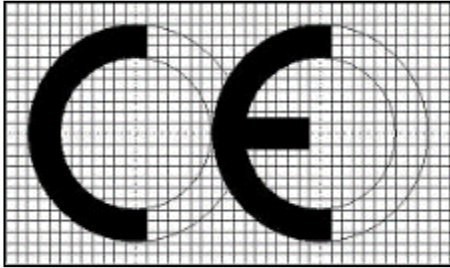


Illustration from 2006/42/EC

CE marking:

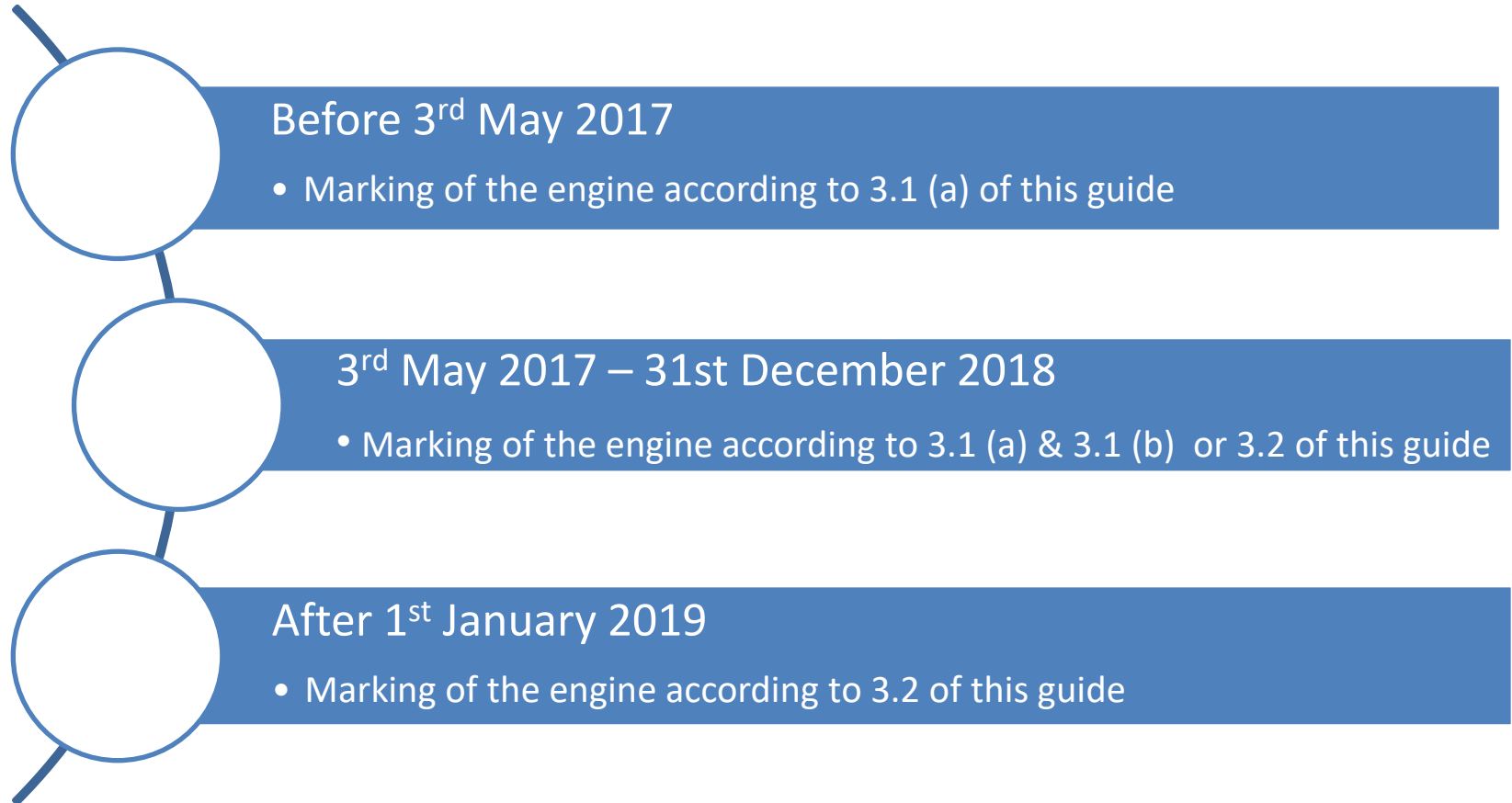
- The CE Conformity marking shall consist of the initials 'CE' as shown left;
- The CE marking shall be affixed to the machinery visibly, legibly and indelibly;
- The CE marking must contain the minimum particulars (on the machine e.g. labelled, printed, embossed, etc.);
- The CE marking must be affixed 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 kg.

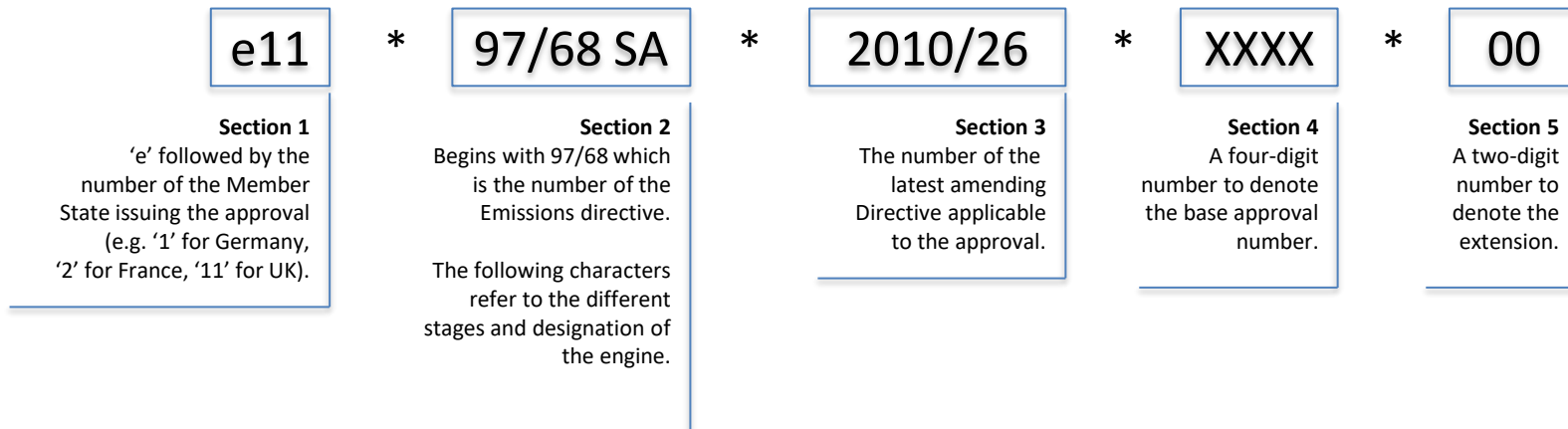
3. Exhaust Emission Marking

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:

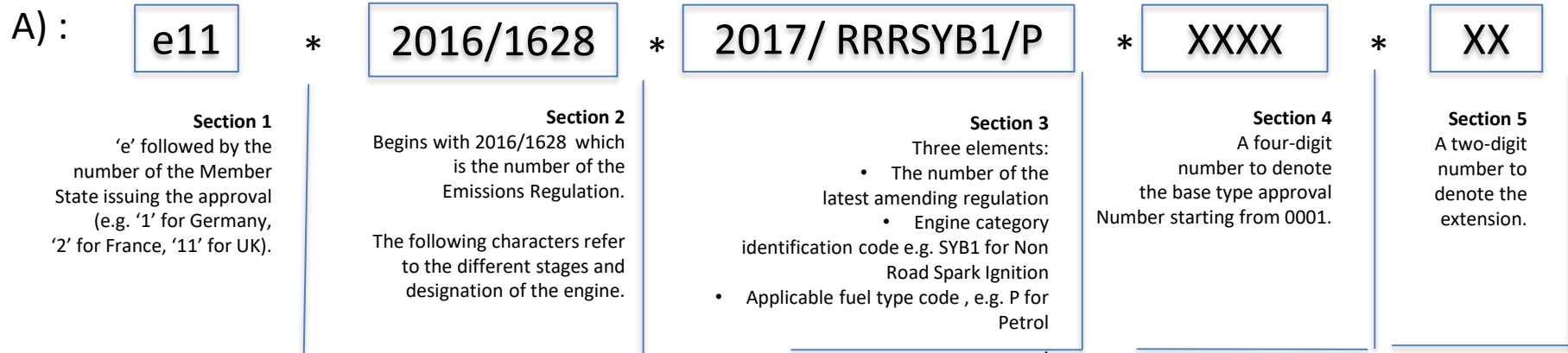


3.1(b) Transition Scheme – Reg. (EU) 2016/1628

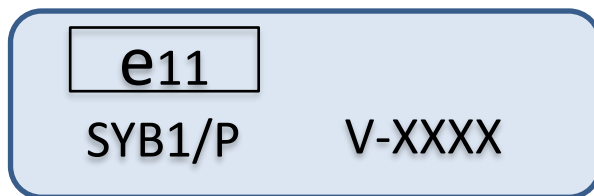
- Transition scheme allows, during a transition period, the placing on the EU market of engines produced prior to the applicable Stage V placing on the market date. These engines are called transition engines.
- ‘transition period’ means the first 24 months following the dates set out in Annex III for 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 machines incorporating transition engines, machine marking shall include the production date in month and year.

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 ride-on lawnmower petrol engine of variable speed and ≥ 225 cc, and of a power range from 0 kW to 19 kW, the engine category is NRS and sub-category is NRS-vi-1b so the coding is SYB1

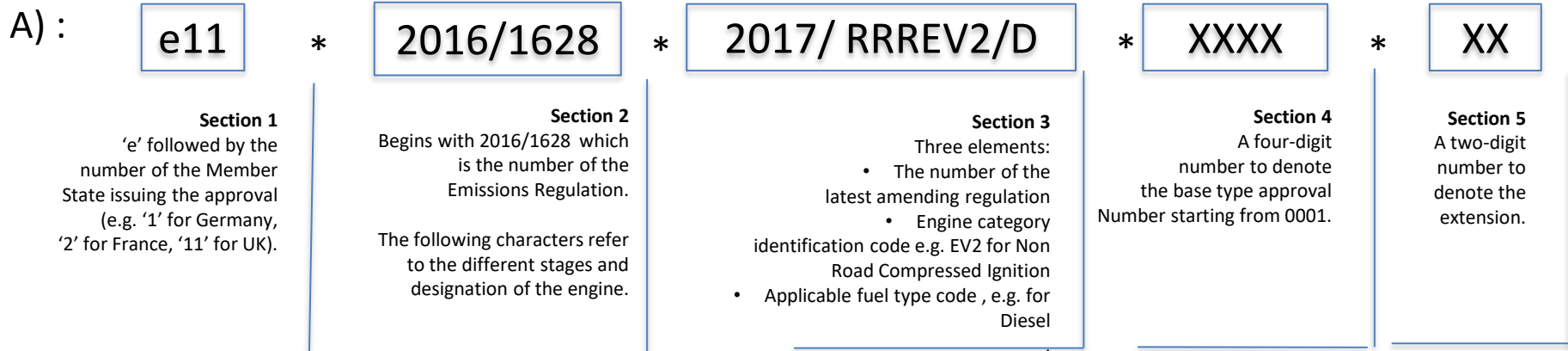


B) :

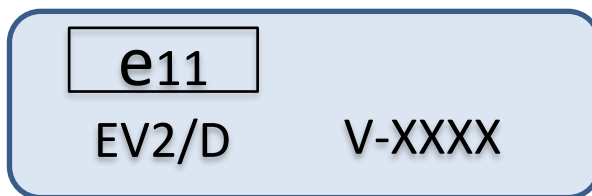


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- Example for a ride-on lawnmower diesel engine (CI) of variable speed and of rated P power range from 8 kW to < 19 kW, the engine category is NRE and sub-category is NRE-v-2 so the coding is EV2



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 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

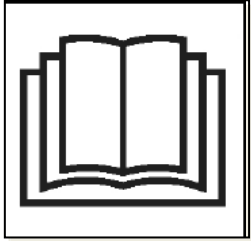
- Noise limits for ride-on lawnmowers by cutting width (L in cm):

$L \leq 50$	= 96 dB(A)
$50 < L \leq 70$	= 98 dB(A)
$70 < L \leq 120$	= 100 dB(A)
$L > 120$	= 105 dB(A)

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 + whole body 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

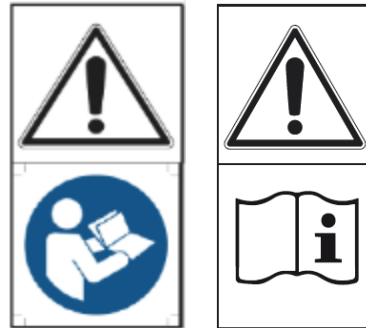


The EU declaration of conformity must contain at least the following particulars:

- 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;
- 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



alternatives

- Keep bystanders away



- WARNING: Keep hands and feet away from the blades!



- * 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