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**AMENDMENT 1**  
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**Earth-moving machinery — Machine  
safety labels — General principles**

**AMENDMENT 1**

*Engins de terrassement — Étiquetage de sécurité de la machine —  
Principes généraux*

*AMENDEMENT 1*



Reference number  
ISO 9244:2008/Amd.1:2016(E)

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ISO 9244-1:2008/Amd. 1 was prepared by ISO/TC 127, *Earth-moving machinery*, Subcommittee SC 2, *Safety, ergonomics and general requirements*.



# Earth-moving machinery — Machine safety labels — General principles

## AMENDMENT 1

Page 7, 4.7.3

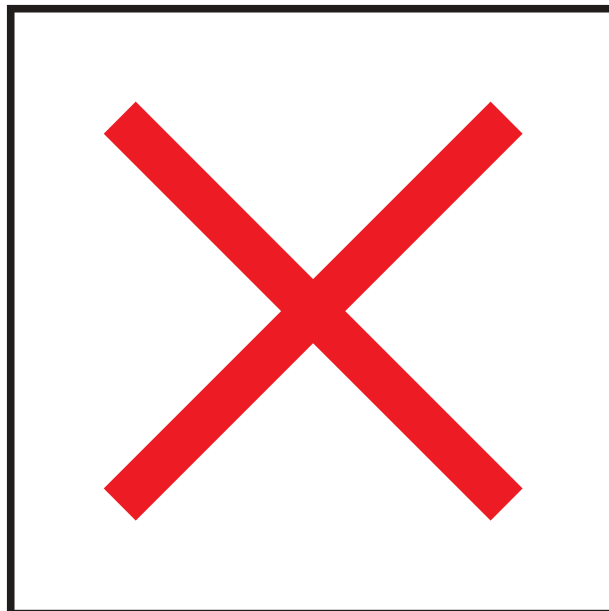
Replace 4.7.3 and [Figure 5](#), including the figure title, with the following:

### 4.7.3 Communicating “do not” messages

**4.7.3.1** Hazard avoidance pictorials are often used to communicate, in graphical form, one or more of the following types of “do not” messages:

- a specific action that should not be taken, because taking the action can result in a hazardous situation;
- a specific location that should be avoided, because being in the location can result in a hazardous situation;
- a specific activity that should be avoided, because engaging in the activity can result in a hazardous situation.

**4.7.3.2** The “do not” messages are communicated graphically by means of a red diagonal cross placed over the pictorial for the action that should not be taken, the location that should be avoided, or the activity that should be avoided. The red diagonal cross is shown in [Figure 5](#). The red diagonal cross is the safety-related application of IEC 60417-6287, which has the general meaning of negation in accordance with IEC 80416-1.



**Figure 5 — Red diagonal cross**

**4.7.3.3** Sizing of the red diagonal cross depends on how it is used with a particular pictorial. It is important that the red diagonal cross is sufficiently large to be easily recognized, but care shall be taken to avoid obscuring any critical detail of the pictorial. The red diagonal cross may be placed over

the entire pictorial or over only the portion of the pictorial that represents the specific action, location, or activity to be avoided.

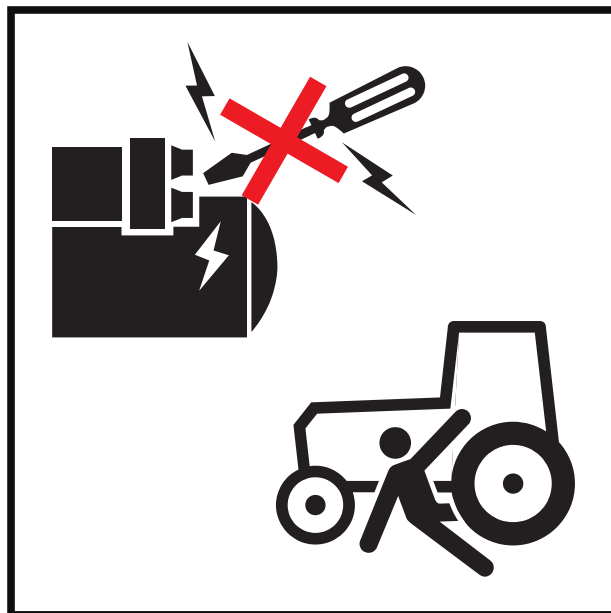
**4.7.3.4** The red prohibition symbol (circle with diagonal bar; see also D.9.2) may be used to communicate a “do not” message, provided that the requirements of ISO 3864-1, ISO 3864-2, and ISO 3864-3 for prohibition safety signs are adhered to.

Page 8, 4.7.5

Replace 4.7.5 and [Figure 7](#), including the figure title, with the following:

#### **4.7.5 Combined pictorials**

In specific circumstances, a hazard description pictorial and a hazard avoidance pictorial may be combined in a single panel. An example is shown in [Figure 7](#).



**Figure 7 — Combined pictorial in a single panel**

Page 10, [Table 1](#)

Replace [Table 1](#), including the table title, with the following:

**Table 1 — Colour regions: chromaticity coordinates and luminance factor of ordinary materials**

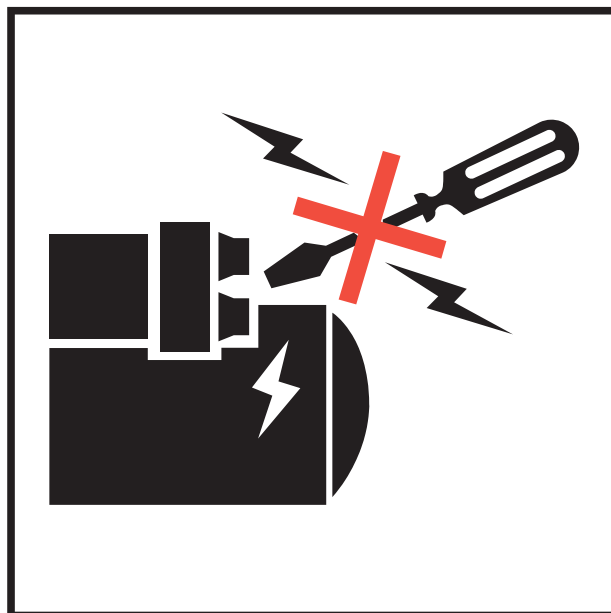
Colour region		Corner points of colour region CIE Standard illuminant D65 CIE 2° standard colorimetric observer				Luminance factor $\beta$	
		1	2	3	4	Minimum	Maximum
Red	<i>x</i>	0,705	0,592	0,574	0,663	0,07	0,20
	<i>y</i>	0,295	0,291	0,351	0,337		
Orange	<i>x</i>	0,603	0,538	0,508	0,563	0,21	
	<i>y</i>	0,397	0,382	0,412	0,436		
Yellow	<i>x</i>	0,475	0,538	0,470	0,427	0,45	0,70
	<i>y</i>	0,525	0,462	0,424	0,472		
White	<i>x</i>	0,350	0,295	0,285	0,340	0,75	
	<i>y</i>	0,360	0,305	0,315	0,370		
Black	<i>x</i>	0,385	0,300	0,260	0,345		0,03
	<i>y</i>	0,355	0,270	0,310	0,295		

Page 11, 5.3.4

Revise 5.3.4 to read as follows:

**5.3.4** The diagonal cross specified in 4.7.3 shall be red. See Annex D for more information.

Replace [Figure B.13](#) with the following:



**Figure B.13 — Do not jump start engine**

Replace [Figure B.15](#) with the following:



**Figure B.15 — Do not ride on fender**



Replace [Figure B.16](#) with the following:



**Figure B.16 — Do not reach into crushing area**

Replace [Figure B.17](#) with the following:



**Figure B.17 — Do not stand under bucket**

Page 35, Annex B

Replace [Figure B.18](#), including the figure title, with the following:



**Figure B.18 — Do not loosen cap when hot**

Page 35, Annex B

Revise the title of B.10 to the following:

**“Do not” messages**

Replace [Figure B.19](#) with the following:



**Figure B.19 — Do not step**

Replace [Figure B.20](#) with the following:



**Figure B.20 — No hands**

Replace [Figure B.21](#) with the following:



**Figure B.21 — No feet**

Replace [Figure B.22](#), including the figure title, with the following:



**Figure B.22 — Do not use ether as low temperature starting aid**

Add the following to C.1 as the third paragraph:

The avoidance panels of the following machine safety labels shall be understood as using the red diagonal cross rather than the prohibition symbol:

- Figure C.11 — Crushing hazard — Run-over — Do not jump start engine
- Figure C.20 — Explosion hazard — Do not use ether as low temperature starting aid
- Figure C.34 — Avoid being run over — Do not ride on fender

Replace list item 8 in D.2 with the following:

- Avoid using the red diagonal cross where the arms of the cross would obscure critical graphical elements and diminish understanding of the “do not” message.

Replace D.9 with the following:

### **D.9 Communicating “do not” messages**

**D.9.1** The red diagonal cross may be placed across a human figure, part of a human figure (for example, hand), or an object to depict that an action should not be taken, that a person should avoid a specified area, or that an activity should be avoided. The arms of the diagonal cross are perpendicular to each other and at a 45° angle to the pictorial frame, although small deviations from these angles are permitted to avoid obscuring critical graphical elements of the underlying pictorial.

**D.9.2** The red prohibition symbol (circle with diagonal bar) may be used to communicate a “do not” message, provided that the requirements of ISO 3864-1, ISO 3864-2, and ISO 3864-3 for prohibition safety signs are adhered to. These requirements include the following:

- red prohibition symbol on white background;
- black safety symbol entirely within the red circle of the prohibition symbol and taking the exclusion zone into account.

ISO 3864-3 should be consulted for graphical design guidance.

*Page 71, Bibliography*

Replace the first two entries in the Bibliography with the following:

[1] ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

[2] ISO 3864-2, *Graphical symbols — Safety colours and safety signs — Part 2: Design principles for product safety labels*

Add the following entries at the end of the Bibliography:

[12] ISO 3864-4, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials*

[13] IEC 80416-1, *Basic principles for graphical symbols for use on equipment — Part 1: Creation of graphical symbols for registration*

