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Road vehicles — Motorcycles and mopeds — Symbols for controls, indicators and tell-tales

Véhicules routiers — Motocycles et cyclomoteurs — Symboles pour les commandes, les indicateurs et les témoins

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

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This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

This third edition cancels and replaces the second edition (ISO 6727:2012), which has been technically revised.

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The main changes compared to the previous edition are as follows:

— the scope has been expanded to mopeds, the third edition of ISO 4129:2012 which was technically revised has been integrated, and

— new symbols have been added due to technology changes.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Road vehicles — Motorcycles and mopeds — Symbols for controls, indicators and tell-tales

1 Scope

This document specifies the symbols, i.e. conventional signs, used to identify certain controls, indicators and tell-tales on a motorcycle/moped[1)] and to facilitate their usage.

This document also indicates the colours of possible optical tell-tales which warn the rider of the operation or malfunctioning of the related devices and equipment.

This document is applicable to those controls, indicators and tell-tales, which, when used, are fitted on the instrument panel or in the immediate vicinity of the motorcycle/moped rider.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

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3.1
symbol
visually perceptible figure used to transmit information independently of language, produced by drawing, printing or other means

[SOURCE: ISO 2575:2010, 3.1]

3.2
tell-tale
display that indicates, by means of a light-emitting device, the actuation of a device, a correct or defective functioning or condition, or a failure to function

[SOURCE: ISO 2575:2010, 3.2]

3.3
sign
visually perceptible graphic, generally larger in size than a *symbol* (3.1), designed for a label, tag or sticker

[SOURCE: ISO 2575:2010, 3.3]

3.4
application
modification of *symbol* (3.1) originals in order to maintain visual clarity and overall consistency

[SOURCE: ISO 2575:2010, 3.4]

1) "Motorcycle/moped" as defined in ISO 3833 but does not include a steering wheel type.

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4 General

4.1 The symbols shall be such that, when viewed by the rider, from their normal seated position or normal operated position, they are recognizable as shown in Annexes A to O.

4.2 The symbol shall be placed on, or adjacent to, the control or tell-tale to be identified. Where this is not possible, the symbol and the control or tell-tale shall be joined by a continuous line as short as possible

4.3 The symbols and signs shall be as given in Annexes A to L and Annex N. Additional symbols are given in Annexes M and O. Minor deviations to the symbols and signs are permitted, provided they are necessary to reproduce an accurate representation to the rider's line of sight.

NOTE Additional annexes can be included in future editions of this document if necessary.

4.4 In developing the symbols and signs shown in Annexes A to O, legibility factors such as line thickness, gaps between lines, symbol and arrow shapes, etc. were carefully considered. Modifications that improve legibility are permitted in the circumstances specified in 4.4.1, 4.4.2 and 4.4.3. When modifying symbol elements, the graphic designer should consult IEC 80416-1, ISO 80416-2, IEC 80416-3, and ISO 80416-4.

4.4.1 Limitations inherent in some reproduction and display technologies can require increased line thickness or other minor modifications of symbols. Such modifications are acceptable provided the symbol remains unchanged in its basic graphical elements and is easily discernible by the operator.

4.4.2 Additionally, to improve the appearance and perceptibility of a graphical symbol or to coordinate with the design of the equipment to which it is applied, it can be necessary to change the line thickness or to round off the corners of the symbol. The graphic designer is normally free to make such changes provided that the essential perceptible characteristics of the symbol are maintained.

4.4.3 The graphic designer may render a symbol in either outline or solid form unless this is otherwise prohibited by the symbol description.

4.5 The vehicle shapes shown in this document are not intended to be restrictive. Modifications to vehicle shape may be introduced by designers in order to better represent the true exterior shape of a given vehicle. Except for vehicle shape, no other symbol element shall be changed, except as provided in 4.4 or in the specific symbol's description.

4.6 If, in a symbol, a vehicle or parts of a vehicle are shown in a side view, a vehicle driving from right to left shall be used.

4.7 For actual use, all symbols shall be reproduced large enough to be easily discernible by the operator. See IEC 80416-3 for guidelines on the proper sizing of symbols. Symbols shall be used in the orientations shown in this document unless otherwise noted for individual symbols.

4.8 For most controls, a light symbol on a dark background is preferred. Displays may use either a light symbol on a dark background or a dark symbol on a light background, depending on which alternative provides the best visual perception. When a symbol image is reversed (for example black to white and vice versa), it shall be done for the entire symbol.

4.9 Each symbol used for the identification of a tell-tale, control or indicator shall stand out clearly against the background.

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4.10 Letters and numerals may be used as symbols, but are not registered by ISO/TC 145, *Graphical symbols*, or published in ISO 7000. For example, the letters R, N, D, listed as symbols <MG.01 to MG.03>, have the meaning indicated when used in association with transmission gear controls and displays on road vehicles. The fonts shown in this document are not intended to be restrictive; other fonts may be substituted provided that legibility is maintained.

4.11 "Failure" or "malfunction" may be conveyed in two ways:

a) Base symbol combined with a colour code according to 5.1;

b) Base symbol combined with failure symbol <MN.02>; optionally, an appropriate colour code in accordance with 5.1 may be added.

4.12 ISO/IEC registration numbers are shown for symbols in this document where applicable. Registration numbers below 5 000 refer to ISO 7000. Registration numbers above 5 000 refer to IEC 60417. Artwork in this document might differ from the artwork shown in IEC 60417, ISO 7000 or the IEC/ISO database on graphical symbols for use on equipment. In this case, the artwork in this document shall be used.

4.13 The symbol numbers not represented are reserved for those symbols still under consideration at the time of publication of this document. It is envisaged that the status of these symbols and the numbers will be resolved by the next revision of this document.

4.14 Symbols in the annexes (except Annex O) of this document are presented at 32 % of original size. The grid marks "⌞" denote the corners of the original 75 mm square. The grid marks are not part of the symbol but are provided to ensure consistent presentation of all symbol graphics.

4.15 New symbols for functions not yet covered in this document should be constructed using symbols or elements of symbols from this document in a logical manner, keeping the coherence with other symbols already published.

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5 Colour

5.1 When the following colours are used on the optical tell-tales, they shall have the meaning indicated below:

— red: danger to persons or very serious damage to equipment, immediate or imminent.

— amber (yellow): caution, outside normal operating limits, vehicle system malfunction, damage to vehicle likely, or other condition which can produce hazard in the longer term.

— green: safe, normal operating condition (except if blue or amber is required by annexes).

A given symbol may be shown in more than one of these colours in order to convey the indicated meanings.

5.2 Certain colours are used for specific tell-tales (refer to "symbol description/application" column in the annexes):

— blue: e.g. high beam, main beam.

— green: e.g. turn signals.

— amber (yellow): e.g. failure of anti-lock brake system.

— red: e.g. hazard warning.

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5.3 If colour is used on symbols for heating and/or cooling systems, the colour red shall be used to indicate hot, and the colour blue shall be used to indicate cold.

5.4 The colour white may be used where none of the above conditions applies.

5.5 A given symbol may be shown in more than one of the colours specified in 5.1 in order to convey a change in the operating condition.

6 Summary table of all symbols

Table 1 provides a pictorial summary of the symbols in each annex.

Table 1 — Summary of all symbols

Symbol No.	ANNEX														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
M.01							R								
M.02							N								
M.03							D								
M.04															
M.05															
M.06							A								
M.07							M								
M.08															
M.09															
M.10															
M.11															
M.12															
M.13															
M.14															

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Annex A
(normative)

Lighting and signalling devices

See Table A.1 for the symbols regarding lighting and signalling devices.

Table A.1 — Symbols for lighting and signalling devices

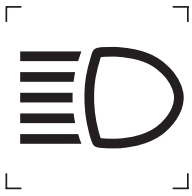
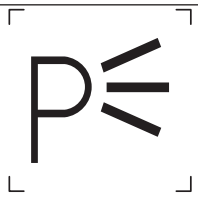
Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
MA.01		**High beam, main beam** Colour of tell-tale light: blue The control operating alternately the high beam and the low beam may include two symbols, one for each of the positions: high beam, low beam. This symbol may be used for optical warning device.	ISO 7000-0082
MA.02		**Low beam, dipped beam** Colour of tell-tale light: green The control operating alternately the high beam and the low beam may include two symbols, one for each of the positions: high beam, low beam.	ISO 7000-0083
MA.03		**Headlamp levelling control** The up and down arrows may be separated.	ISO 7000-0151
MA.04		**Front fog light** Colour of tell-tale light: green If one control is used for both front and rear fog lights, this symbol shall be used.	ISO 7000-0633
MA.05		**Rear fog light** Colour of tell-tale light: amber (yellow) If one control is used for both front and rear fog lights, the symbol for front fog light (MA.04) shall be used.	ISO 7000-0634
MA.06		**Parking lights** Colour of tell-tale light: green	ISO 7000-0240

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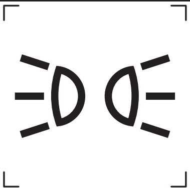
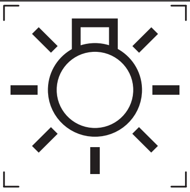
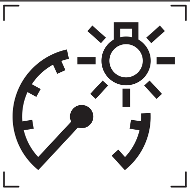
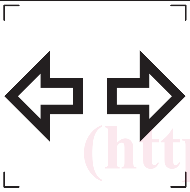
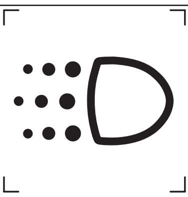
Table A.1 *(continued)*

Symbol number	Symbol form/shape	Symbol description/application	ISO/IEC registration number
MA.07		**Position lights** Colour of tell-tale light: green	ISO 7000-0456
MA.08		**Master lamp** Colour of tell-tale light: green	Application of IEC 60417-5012
MA.09		**Instrument panel illumination**	ISO 7000-1556B
MA.10		**Turn signals** Colour of tell-tale light: green The left and right arrows may be either included in 1 unique symbol, or 2 separate ones.	ISO 7000-0084
MA.11		**Hazard warning** Simultaneous operation of either green turn signal tell-tales, or separate red signal. This symbol applies only to the control and to the separate red tell-tale.	ISO 7000-0085
MA.12		**Signal horn**	ISO 7000-0244
MA.13		**Daytime running lights**	Application of ISO 7000-2611
MA.14		**Bend lighting** This symbol may be used for “Cornering lighting” or AFS” (Adaptive Front-lighting System)	Application of ISO 7000-2669

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