DRAFT INTERNATIONAL STANDARD

ISO/DIS 2575

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

Véhicules routiers — Symboles pour les commandes, indicateurs et témoins

ICS: 43.040.30; 01.080.20

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

The committee responsible for this document is ISO/TC 22/SC 39.

This ninth edition cancels and replaces the eight edition. It also incorporates the content of the Amendments ISO 2575:2010/Amd.1:2011, ISO 2575:2010/Amd.3:2014, ISO 2575:2010/Amd.5:2016, ISO 2575:2010/Amd.6:2016 and ISO 2575:2010/Amd.7:2016. The following additional updates have been conducted:

— All Amendments from the eight version have been included;

— Column "Purpose and application of use" including individual descriptions were added to all symbols;

— Annex W was restructured according to the structure of the other annexes.

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

IMPORTANT — The electronic file of this document contains colours which are considered to be useful for the correct understanding of the document. Users should therefore consider printing this document using a colour printer.

1 Scope

This document specifies symbols (i.e. conventional signs) for use on controls, indicators and tell-tales applying to passenger cars, light and heavy commercial vehicles and buses, to ensure identification and facilitate use. This international standard additionally describes the purpose and application for the symbols.

It also indicates the colours of possible optical tell-tales, which inform the driver of either correct operation or malfunctioning of the related devices.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

ISO 15008, *Road vehicles — Ergonomic aspects of transport information and control systems — Specifications and test procedures for in-vehicle visual presentation*

3 Terms and definitions

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:

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

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

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

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

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

3.4
application
modification of symbol originals in order to maintain visual clarity and overall consistency

4 General

4.1 The symbols and signs shall be as given in Annexes A to N and Annex X. Additional symbols are given in Annexes W, Y and Z. Minor deviations to the symbols and signs are permitted, provided they are necessary to reproduce an accurate representation to the driver's line of sight.

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

4.2 In developing the symbols and signs shown in Annexes A to Z, 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 4.2.1, 4.2.2 and 4.2.3. When modifying symbol elements, the graphic designer should consult IEC 80416-1, ISO 80416-2, IEC 80416-3, and ISO 80416-4.

4.2.1 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.

4.2.2 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.

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

4.3 The shapes of the vehicle, seat and steering wheel shown in this International Standard are not intended to be restrictive but are the recommended shapes. Modifications to these shapes may be introduced by designers in order to better represent the true shape of a given element. Except for the aforementioned shapes, no other symbol elements shall be changed, except as provided in 4.2 or in the specific symbol's description.

4.4 If a symbol shows a vehicle or parts of a vehicle in a side view, a vehicle moving from right to left in the symbol area shall be assumed. If a symbol shows a vehicle or parts of a vehicle in a top, plan view, a vehicle moving from bottom to top in the symbol area shall be assumed.

4.5 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.

4.6 Symbols on controls and displays shall contrast well with their background. 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.

4.7 For symbols that are displayed using pixel matrices, the character matrix shall be as stipulated in ISO 15008.

4.8 Letters and numerals may be used as symbols. For example, the letters P, R, N, D, 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.

4.9 "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 X.08; optionally, an appropriate colour code in accordance with 5.1 may be added.

4.10 ISO/IEC registration numbers are shown for symbols in this document where applicable. Registration numbers below 5000 refer to ISO 7000. Registration numbers above 5000 refer to IEC 60417. Artwork in this document might differ from the artwork shown in IEC 60417, ISO 7000 or the IEC/ISO Online Browsing Platform database on graphical symbols for use on equipment. In this case, the artwork in this document shall be used. If a symbol is illustrated in this document differs from the one shown in the ISO/IEC OBP, it will be referenced as "Application of…"

4.11 The symbol numbers not represented are reserved for those symbols still under consideration at the time of publication of this edition of ISO 2575. It is envisaged that the status of these symbols and the numbers will be resolved by the next revision of this document.

4.12 Symbols in the annexes (except Annex Z) 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.

4.13 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.

5 Colour

5.1 When used on optical indicators or tell-tales, the following colours have the meanings indicated:

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

— yellow or amber: 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 (where blue or yellow is not required).

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, low beam;

— yellow or amber: e.g. failure of anti-lock brake system;

— red: e.g. hazard warning.

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. The purpose and application of the symbols are provided in each annex.

Table 1 — Summary of all symbols

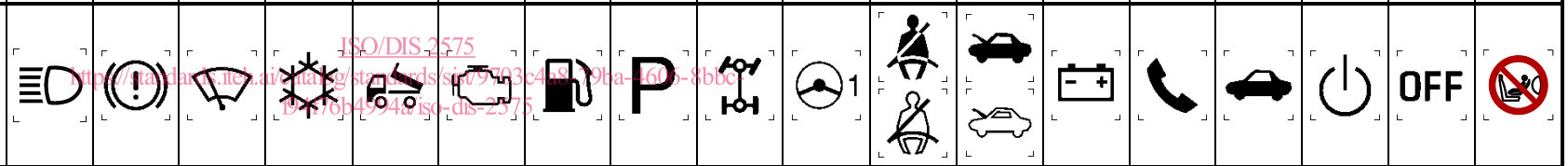
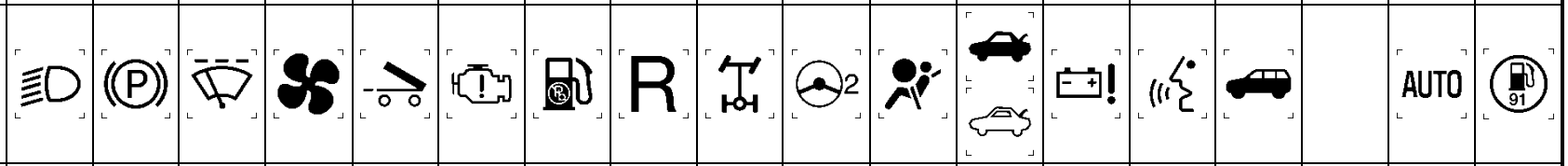
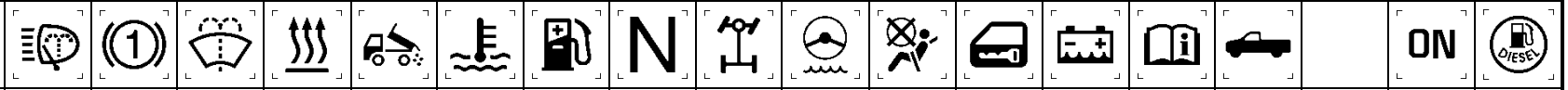
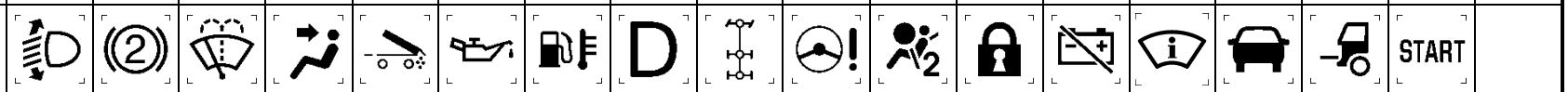
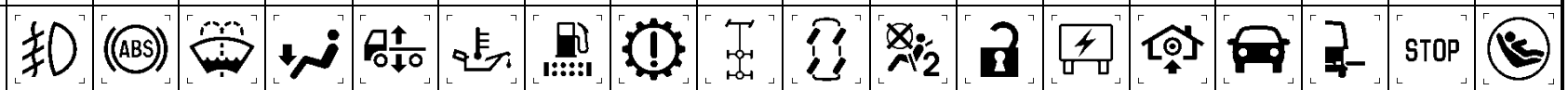
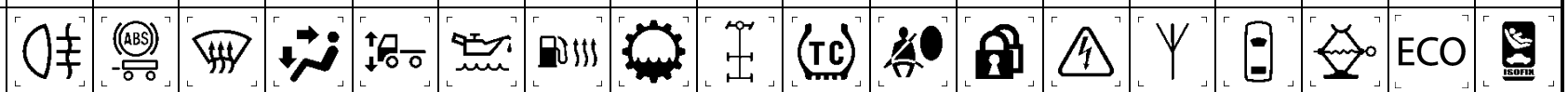
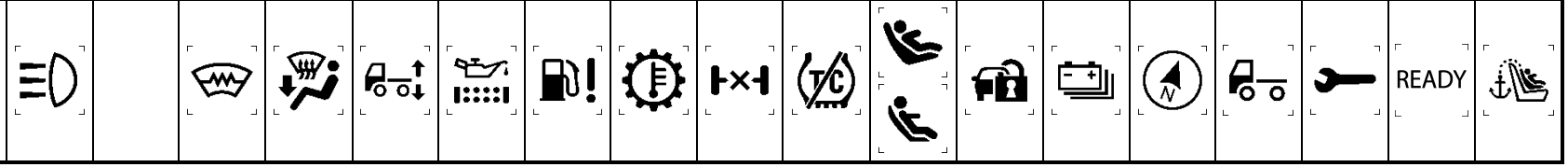
Symbol No.	Annex[a]																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	W	X	Y	Z
01																	OFF	
02																	AUTO	
03																	ON	
04																	START	
05																	STOP	
06																	ECO	
07																	READY	

Table 1 *(continued)*

Symbol No.	Annex[a]																	
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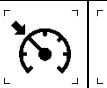
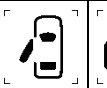
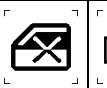
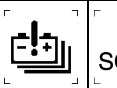
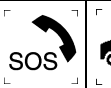
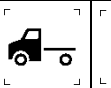
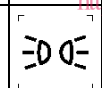
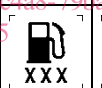
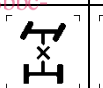
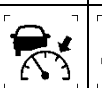
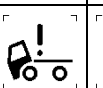
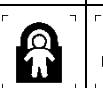
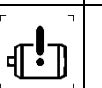
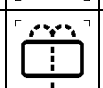
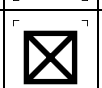
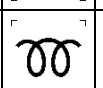
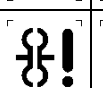
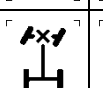
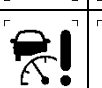
08																	MAX	
09																	MIN	AIRBAG
10																	RES	
11																	SET	
12																		
13																		
14																		
15								A										
16								M										

Table 1 *(continued)*

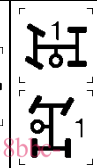
Symbol No.	Annex[a]																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	W	X	Y	Z
17																		
18																		
19																		
20																		
21																		
22																		
23																		
24																		
25																		

Table 1 *(continued)*

Symbol No.	Annex[a]																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	W	X	Y	Z
26																		
27																		
28																		
29																		
30																		
31																		
32																		
33																		
34																		

Table 1 *(continued)*

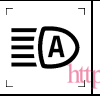
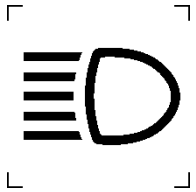
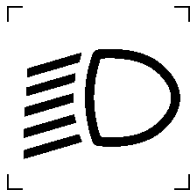
Symbol No.	Annex[a]																	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	W	X	Y	Z
35																		
36																		
37																		
38																		
39																		
40																		
41																		
42																		
43																		

Table 1 *(continued)*

a	A	=	Lighting and signalling devices
	B	=	Braking systems
	C	=	Visibility
	D	=	Cab environment and comfort
	E	=	Maintenance and load functions
	F	=	Engine
	G	=	Fuel system
	H	=	Transmission
	I	=	Power drive
	J	=	Vehicle handling and cruise control
	K	=	Active and passive safety systems
	L	=	Security
	M	=	Electric functions in general and electric road vehicles
	N	=	Information and communication
	W	=	Generic vehicle shapes
	X	=	Miscellaneous
	Y	=	Special symbols
	Z	=	Special signs

Annex A
(normative)

Lighting and signalling devices

Symbol number	Symbol form/shape	Symbol title	Purpose and application of use	ISO/IEC registration number
A.01		**High beam, main beam**	To identify the control that operates the high intensity, forward illumination. To indicate the operational status of the high beam function. 1) When used as a status indicator the symbol shall be steady blue; 2) Framed areas of this symbol may be solid; 3) 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 7000-0082
A.02		**Low beam, dipped beam**	To identify the control that operates the moderate intensity, forward illumination. To indicate the operational status of the low beam function. 1) Framed areas of this symbol may be solid; 2) 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