



400 Commonwealth Drive, Warrendale, PA 15096-0001

# SURFACE VEHICLE STANDARD

**SAE** J2402  
ISO 2575

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## ROAD VEHICLES—SYMBOLS FOR CONTROLS, INDICATORS, AND TELL-TALES

This document is technically equivalent to ISO 2575:1995.

1. **Scope**—This SAE Standard establishes the symbols, i.e., conventional signs, for use on controls, indicators, and tell-tales of a road vehicle to ensure identification and facilitate use.

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

2. **References**

2.1 **Applicable Publications**—The following standards contain provisions which through reference in this text, constitute provisions of this document. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this document are encouraged to investigate the possibility of applying the most recent editions of the standards indicated in 2.1.1 and 2.1.2. Members of IEC and ISO maintain registers of currently valid documents.

2.1.1 ISO PUBLICATIONS—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

ISO 2575:1995—Road vehicles—Symbols for controls, indicators and tell-tales

ISO 3461-1:1988—General principles for the creation of graphical symbols—Part 1: Graphical symbols for use on equipment

ISO 4196:1984—Graphical symbols—Use of arrows

ISO 7000:1989—Graphical symbols for use on equipment—Index and synopsis

2.1.2 IEC PUBLICATION—Available from ANSI, 11 West 42nd Street, New York, NY 10036-8002.

IEC 417:1973—Graphical Symbols for Use on Equipment—Index, survey and compilation of the single sheets

3. **Definitions**—For the purposes of this document, the following definitions apply:

3.1 **Symbol**—Visually perceptible figure used to transmit information independent 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.

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**4. General**

**4.1** The symbols shall be as given in succeeding sections, except for minor deviations necessary to reproduce an accurate representation to the driver's line of sight.

**4.2** In developing the symbols shown in Section 6, 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 following two circumstances. When modifying symbol elements, the graphic designer should consult ISO 4196 and ISO 3461-1.

4.2.1 Limitations inherent in some reproduction and display technologies may require increased line thicknesses 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 graphic symbol or to coordinate with the design of the equipment to which it is applied, it may 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.

**4.3** For actual use, all symbols shall be reproduced large enough to be easily discernible by the operator. See ISO 3461-1 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.

**4.4** 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** Symbols on controls and displays shall have good contrast to 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.

**4.6** ISO/IEC registration numbers are shown for symbols in this document. Registration numbers below 5000 refer to ISO 7000 and ISO 7001. Registration numbers above 5000 refer to IEC 417.

**4.7** Letters and numerals may be used as symbols, but are not registered by ISO/TC 145 or published in ISO 7000. For example, the letters P, R, N, D, listed as symbols 6.57 to 6.60, 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, but care shall be taken that legibility is maintained.

**4.8** Symbols in this document are presented 32% of original size. The grid marks "L" denote the corners of a 75 mm square. The grid marks are not part of the symbol but are provided to ensure consistent presentation of all symbol graphics.

**4.9** Microfiches of the symbols are available from the ISO/TC 145 Secretariat.

## 5. Color

5.1 When used on optical indicators or tell-tales, the following colors 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 may produce hazard in the longer term.
- Green—Safe, normal operating condition (where blue or yellow are not required).

5.2 Certain colors are used for specific tell-tales (refer to symbol description/application in Section 6):

- Blue—e.g., headlight high (main) beam
- Green—e.g., turn signals
- Yellow—e.g., failure of anti-lock braking system
- Red—e.g., hazard warning

The colors green, yellow, and red are also required for other tell-tales by various countries.

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

5.4 The color white may be used where none of the previous conditions apply.

6. **Designation and Illustration of Symbols**—See Table 1.

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS

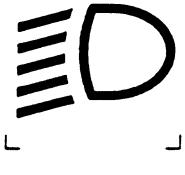
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.1		High (main) Beam Steady blue tell-tale.  The control operating alternately the high beam and the low beam may include two symbols, one for each of the positions: high beam; low beam.  Framed areas of this symbol may be solid.	7000-0082
6.2		Low (dipped) Beam  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.  Framed areas of this symbol may be solid.	7000-0083

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.3		Turn Signals Flashing green light(s). Framed areas of this symbol may be solid. It is permissible to separate the left and right arrows.	7000-0084
6.4		Hazard Warning Simultaneous operation of both green turn signal tell-tales, or separate red signal. This symbol applies only to the control and to the separate red tell-tale. Framed areas of this symbol may be solid.	7000-0085
6.5		Windshield Wiper	7000-0086
6.6		Windshield Washer This symbol may also be used on the filler cap of the fluid container.	7000-0088
6.7		Windshield Wiper and Washer	7000-0087

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

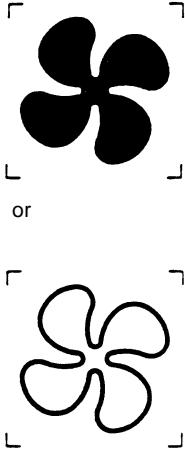
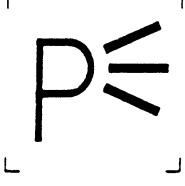
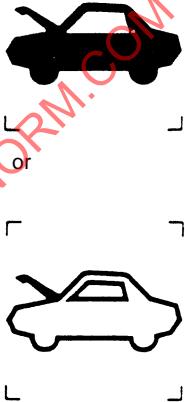
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.8		Ventilating Fan	7000-0089
6.9		Parking Lights	7000-0240
6.10		Front Hood (Bonnet)	7000-0241

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

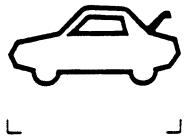
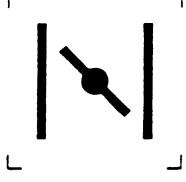
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.11	  or	Rear Trunk (Boot)	7000-0242
6.12		Choke	7000-0243
6.13		Horn	7000-0244

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

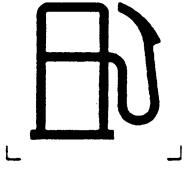
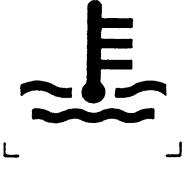
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.14	 or 	Fuel This symbol may also be used on the filler cap of the fuel tank.	7000-0245
6.15		Engine Coolant Temperature	7000-0246
6.16		Battery Charging Condition	7000-0247
6.17		Engine Oil This symbol may also be used on the filler cap for engine oil.	7000-0248

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

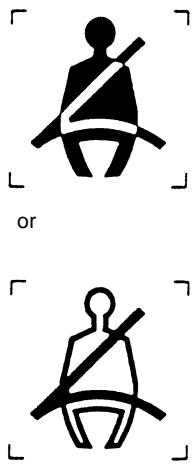
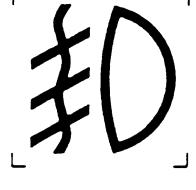
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.18		Seat Belt	7000-0249
6.19		Headlight Cleaner This symbol may also be used on the filler cap of the fluid container.	7000-0250
6.20		Lighter	7000-0620
6.21		Front Fog Light If one symbol is used for both front and rear fog lights, this symbol shall be used.	7000-0633

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

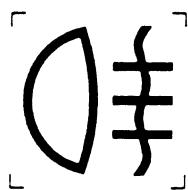
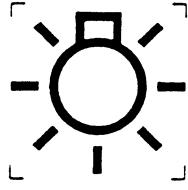
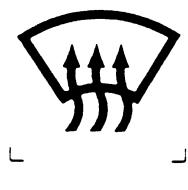
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.22		Rear Fog Light  If one symbol is used for both front and rear fog lights, the symbol for front fog light (6.21) shall be used.	7000-0634
6.23		Master Lighting Switch	IEC 417-5012
6.24		Windshield Demisting and Defrosting	7000-0635
6.25		Rear Window Demisting and Defrosting	7000-0636
6.26		Unleaded Fuel  This symbol may also be used on the filler cap of the fuel tank.	7000-0237

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.27		Headlight Levelling Manual Control	7000-0151
6.28		Rear Window Wiper	7000-0097
6.29		Rear Window Washer This symbol may also be used on the filler cap of the fluid container.	7000-0099
6.30		Rear Window Wiper and Washer	7000-0098
6.31		Brake Failure In the case where a single tell-tale indicates more than one brake system condition, this symbol shall be used.	7000-0239

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.32		Parking Brake  In the case where a single tell-tale indicates more than one brake system condition, the symbol for brake failure (6.31) shall be used.	7000-0238
6.33		Position (Side) Lights	7000-0456
6.34		Diesel Pre-heat	7000-0457
6.35		Long-Range Light	7000-0639
6.36		Engine	7000-0640

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

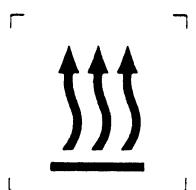
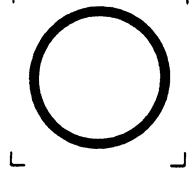
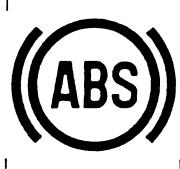
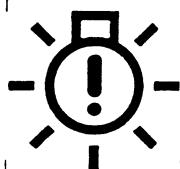
Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.37		Interior Heating	7000-0637
6.38		Air-conditioning System	7000-0027
6.39		Off	IEC 417-5008
6.40		Upper Air Outlet Arrow may be colored blue to denote cool air or red to denote heated air.	7000-1865
6.41		Lower Air Outlet Arrow may be colored blue to denote cool air or red to denote heated air.	7000-1866

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.42		Upper air outlet and lower air outlet. Other combinations of the arrows may be used as needed. Arrows may be colored blue to denote cool air or red to denote heated air.	7000-1867
6.43		(For Future Symbol)	
6.44		(For Future Symbol)	
6.45		Windshield Wiper—Intermittent	7000-0647
6.46		Heated Seat	7000-0649

TABLE 1—DESIGNATION AND ILLUSTRATION OF SYMBOLS (CONTINUED)

Symbol Number	Symbol Form/Shape	Symbol Description/Application	ISO/IEC Registration Number
6.47		Failure of anti-lock braking system Yellow tell-tale The letters "ABS" may match the type style used throughout the instrument panel.	7000-1407
6.48		Exterior Bulb Failure Yellow tell-tale	7000-1555
6.49		Instrument Illumination Framed area of this symbol may be solid	7000-1556
6.50		Door Lock Control	7000-0638
6.51		Fuel Economy	7000-0641