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Road vehicles — Levelling devices for headlamp dipped beam

Véhicules routiers — Dispositifs correcteurs d'orientation des projecteurs de feux de croisement

Reference number
ISO 8218 : 1989 (E)

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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8218 was prepared by Technical Committee ISO/TC 22, *Road vehicles*.

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Road vehicles — Levelling devices for headlamp dipped beam

1 Scope

This International Standard establishes working principles for manual control of levelling devices, as defined in ISO 7227, for headlamp dipped beams for road vehicles as defined in ISO 3833.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 303 : 1986, *Road vehicles — Installation of lighting and light signalling devices for motor vehicles and their trailers.*

ISO 3833 : 1977, *Road vehicles — Types — Terms and definitions.*

ISO 4182 : 1986, *Motor vehicles — Measurement of variations in dipped-beam headlamp angle as a function of load.*

ISO 7227 : 1987, *Road vehicles — Lighting and light signalling devices — Vocabulary.*

3 General specifications

3.1 If manual levelling devices are used, either continuously or through a series of positions, they shall have a marked "0" position where the lamps can be put back to the initial alignment defined in ISO 303 for dipped beams (passing beams) by means of the usual adjusting screws.

3.2 These manual levelling devices shall be operable from the driving seat.

3.3 Continuous levelling devices shall have reference marks near the control indicating

a) the initial loading condition;

b) the main loading conditions that require adjustment of the dipped beam.

3.4 The number of positions on discontinuous levelling devices or devices operating with a series of positions shall be such as to ensure compliance, starting from an initial downwards inclination, with the range of values for the loading conditions as defined in ISO 4182.

For these devices,

a) the initial loading condition and

b) the loading conditions that require adjustment of the dipped beam

shall be clearly marked near the control of the device.

4 Controls for headlamp levelling device

4.1 Downward inclination of the dipped beam shall be produced in one of the following ways:

a) by moving a control downwards or to the left or forwards;

b) by rotating a control counterclockwise;

c) by depressing or touching a button (push control or touch key). In this case the button or the key which gives the downward inclination shall be installed to the left or below the button(s) for other dipped beam positions.

A rotary control which is installed edge-on (examples 4 and 5 in figure 2) shall follow the operating principle of controls of type a). The same applies to electrical controls using a rocker switch.

4.2 On or near the control, symbols shall indicate clearly the movements corresponding to the downwards and upwards inclination of the dipped beam.

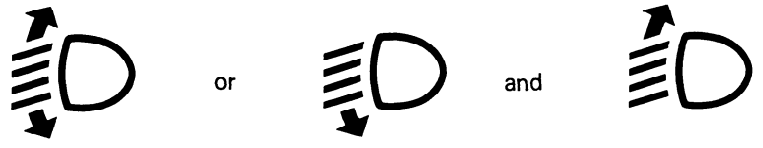
4.3 The marked "0" position corresponds to the initial alignment specified in 3.1.

4.4 The marked "0" position, as in 3.1, need not be at the end of the scale: it shall be identified unambiguously.

4.5 The marking specified in 4.2 shall be explained in the owner's handbook.

4.6 Only the symbols shown in figure 1 may be used to identify the headlamp levelling control.

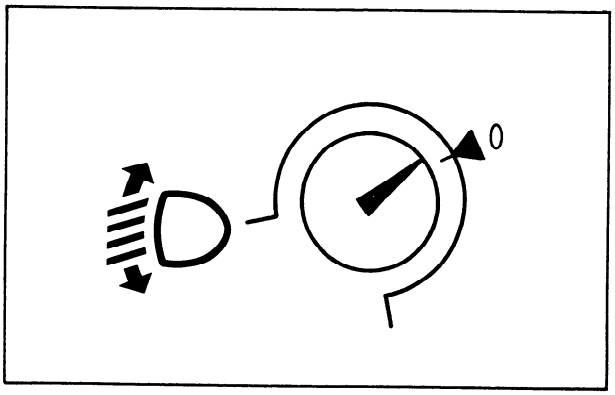
4.7 The examples given in figure 2, as to how symbols shown in figure 1 should be used, are not restrictive.



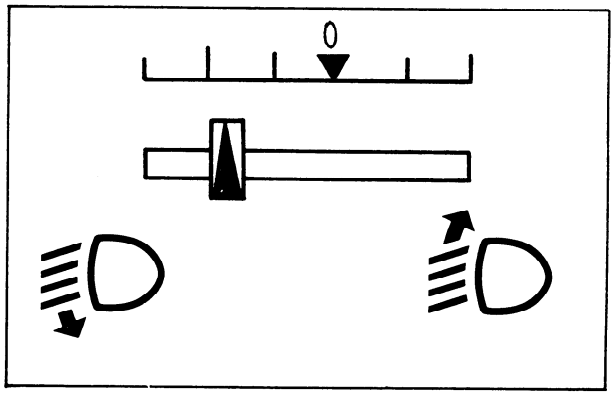
Basic symbol[1)] **Permitted symbols**

1) This symbol is in accordance with ISO 2575 : 1982, *Road vehicles — Symbols for controls, indications and tell-tales.*

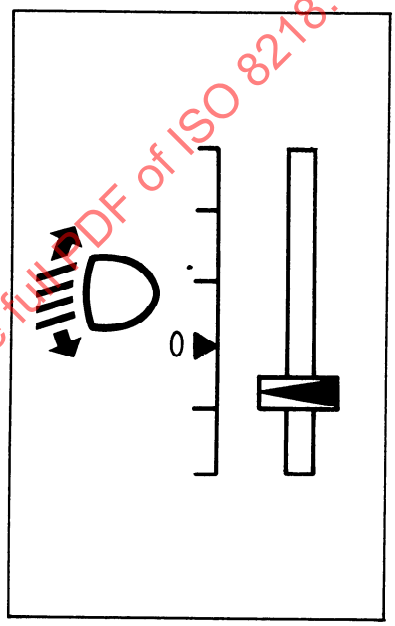
Figure 1 — Headlamp levelling device control symbols



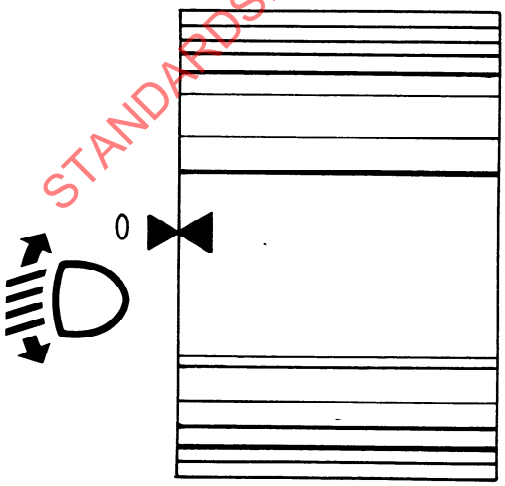
Example 1



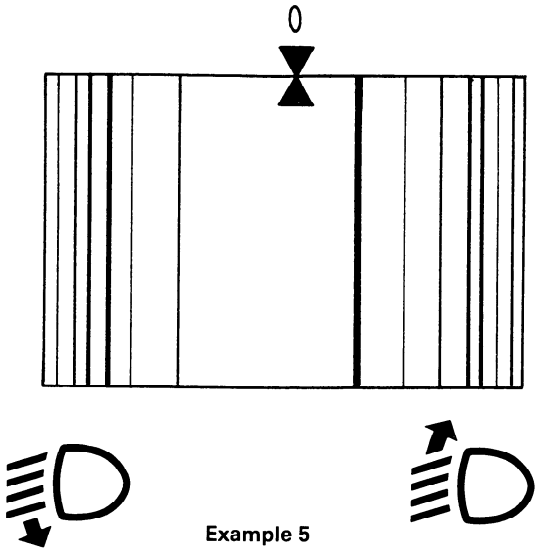
Example 2



Example 3



Example 4



Example 5

Figure 2 — Examples of use of symbols

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