



Symbols for control markings and displays on tractors and machinery for agriculture and forestry, and on powered lawn and garden equipment

Part 1. Schedule of common symbols

Symboles pour les plaques signalétiques fixées sur les tracteurs, le matériel agricole et forestier,
les tondeuses de gazon et l'équipement de jardinage à moteur
Partie 1. Liste des symboles communs

Symbole für Kennzeichnung von Bedienungselementen und Schilder auf Schleppern und
Maschinen für Land- und Forstwirtschaft sowie kraftangetriebene Rasen- und
Garteneinrichtungen
Teil 1. Liste der gemeinsamen Symbole

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Foreword

This British Standard, which has been prepared under the direction of the Agricultural Machinery and Implements Standards Committee, was first published in 1973.

This standard, which is in four Parts, has been revised to take account of corresponding work published and currently in preparation by the International Organization for Standardization (ISO); it is technically consistent with ISO 3767 but contains a substantial number of additional symbols. As and when other ISO standards are published, this standard will be reviewed with the object of maintaining alignment.

The other Parts of this standard are:

Part 2. Schedule of symbols for agricultural tractors and machines;

Part 3*. Schedule of symbols for powered lawn and garden equipment;

Part 4*. Schedule of symbols for forestry machinery.

In each Part a distinction is made between those symbols normally associated with, but not necessarily limited to, the marking of controls actuated by the operator and with symbols for all other purposes.

NOTE. The colours specified for cautionary and danger symbols comply with the requirements of BS 5378.

*In course of preparation.

British Standard

Symbols for control markings and displays on tractors and machinery for agriculture and forestry, and on powered lawn and garden equipment

Part 1. Schedule of common symbols

1. Scope

This Part of this British Standard describes a schedule of symbols which may be common on controls and displays for tractors and machinery for use with agricultural, forestry, powered lawn and garden equipment.

The standard gives detailed designs for the range of symbols. Where appropriate, explanatory notes on design, application and examples of use are given against each symbol. An appendix is included which illustrates examples of the use of groups of symbols.

2. Reference

The titles of the standards publications referred to in this British Standard are listed on the inside back cover.

3. Combination of symbols

It is comparatively rare for a single symbol to be used in isolation. The combining or superimposition of symbols on displays is implicit in their application. The combinations generally fall into one of three types of association.

(a) *Hierarchical arrangements.* One symbol serves as a general label or heading for a further more detailed group of symbols, e.g.

WINDSCREEN
wash wipe heat vent

(b) *Visual association of symbols.* Symbols are visually related to one another by juxtaposition or superimposition, e.g.

ground engine
speed oil

(c) *Association of symbol with the measurement value* by combining, for example, the element with the quantitative unit, e.g.

temperature °C fuel—full

Other more specialized machine applications may require even more complex combinations. The classification will allow these associations to be readily appreciated and exploited and, in theory, any combinations are possible. Appendix A to this standard gives details of the graphic principles in more detail, and shows some derived symbols related to the basic set.

NOTE. Symbols used on a control knob may include a containing circle.

4. Recommendations for symbol dimensions

This standard does not specify the dimensions of any of the symbols; but all the symbols have been drawn to the same scale and it is recommended that, where symbols are used in combination, as a general rule they retain the same size and proportion relative to one another.

All symbols should be large enough to be immediately recognizable without possible error, since a symbol which is difficult to identify may cause accidents.

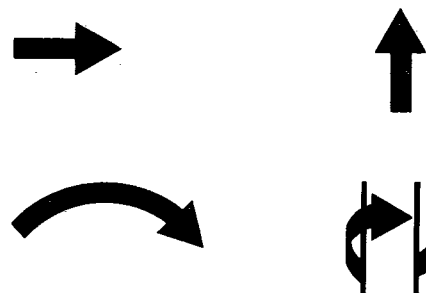
5. Use of the arrow

5.1 Shape and application. The arrow is a unique symbol in relation to all of the symbols in this standard and thus deserves special consideration on its own. It rarely appears as an isolated element, but is frequently used as the basis for a symbol, or qualifies another symbol to give it additional meaning.

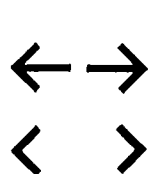
There are four different applications using the arrow shape and it is desirable to use a different form in each of these instances.

- (a) Directional information.
- (b) Dimensional information.
- (c) Functional information.
- (d) Relative motion information.

5.2 Directional information arrows. The recommended form of a directional arrow is shown below, the important dimensions being the shape and proportion of the head and the associated width of the shaft. Overall length is not crucial and may be varied to accommodate situations where the arrow is graphically combined with other symbol parts. The curved form is for rotational information, the perspective view being utilized when appropriate, to superimpose it on a shaft representation.



5.3 Dimensional information arrows. For symbols where dimensional concepts are required, an open headed arrow is used.



Alternative forms



e.g. height above ground

arrow shown on such symbols need not imply a specific direction. A heavier, bolder form of functional arrow is used in these cases.



e.g. disengage

5.4 Functional information arrows. Many symbols require a functional dynamic arrow to improve their ease of interpretation. It is inappropriate to use the same arrow form as is used to define spatial directions because the

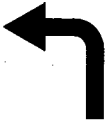
5.5 Relative motion information arrows. Where it is not possible to define exactly the direction in space, it is often useful to define relative motion between two machine parts; in this case the truncated arrow heads are used in pairs to define 'in' (or towards) and 'out' (away from).

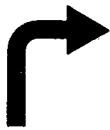
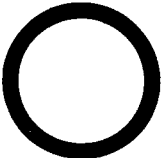


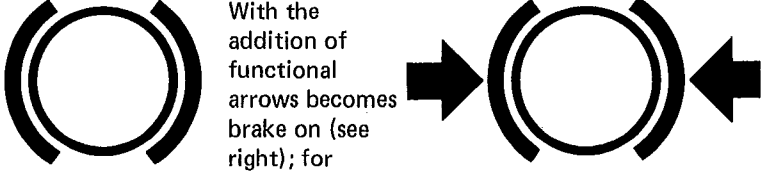
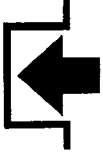
6. Symbols for operator's controls

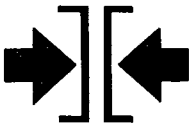
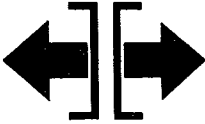
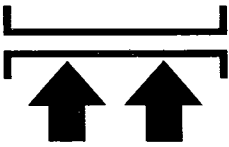
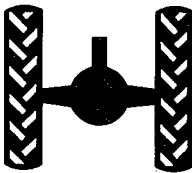
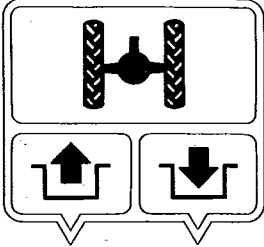
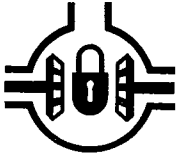
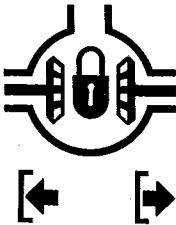
6.1 General. This clause covers symbols primarily associated with controls actuated by the operator of a machine, and includes relevant basic elements of symbols from which complete symbols have been derived.

NOTE. Where appropriate, the symbols may also be used on the related indicators and instruments.

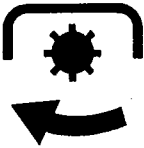
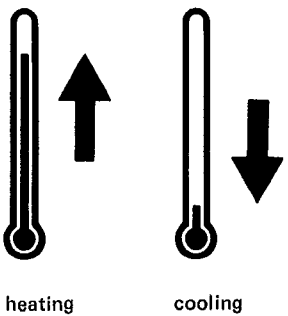
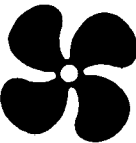
No.	Designation	Symbol	Explanation	Example/cross reference	Notes
6.2	Direction				
6.2.1	Control lever operating direction				May be used in conjunction with other symbols to designate lever motion. Central dot indicates the mid-position or neutral
6.2.2	Vertical movement		Only to be used in conjunction with other basic elements		
6.2.2.1	Down				
6.2.2.2	Up				
6.2.3	Move left				

No.	Designation	Symbol	Explanation	Example/cross reference	Notes
6.2.4	Move right				
6.2.5	Forward	 	Example of one type of machine. Symbol may be in plan or profile		Replace dotted area with appropriate machine symbol, suitably orientated to indicate direction of movement
6.2.6	Reverse	 			
6.2.7	Rotate (slew) clockwise				
6.2.8	Rotate (slew) anticlockwise				
6.3	Start/on		This symbol should be green. Can combine with stop symbol for combined function control symbol (see 6.4)		
6.4	Stop/off		This symbol should be red. Can combine with start symbol for combined function control		
6.5	Increase		Size relationships of the plus and minus symbols are not absolute, but should be related to the symbol to which they apply		
6.6	Decrease				

No.	Designation	Symbol	Explanation	Example/cross reference	Notes
6.7	Progressively variable — rotational		Usually appear with increase/decrease symbols		Wherever possible controls are expected to be designed such that they rotate clockwise to increase. In exceptional circumstances, where the converse applies, a mirror-image of the symbol shown may be employed
6.8	Progressively variable — linear				
6.9	Neutral	N	Neutral symbol for transmission shift pattern		
6.10	Part	P	Park symbol for transmission shift pattern		
6.11	Brake		With the addition of functional arrows becomes brake on (see right); for brake off reverse arrows		Symbol may be reorientated and/or reversed as appropriate
6.12	Parking brake				
6.13	Engage		Change orientation if necessary through 90° or 180°		
6.14	Disengage				

No.	Designation	Symbol	Explanation	Example/cross reference	Notes
6.15	Clamp/hold				
6.16	Unclamp/release		Change orientation if necessary through 90°		
6.17	Float mechanism				
6.18	Clearance adjustment				See also 7.24
6.19	Axle				Used to indicate engagement/disengagement of additional axle
6.20	Differential lock				Engage Disengage

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No.	Designation	Symbol	Explanation	Example/cross reference	Notes
6.21	Power take-off				
6.21.1	On				
6.21.2	Off				
6.22	Ignition				
6.23	Choke (Cold starting aid mixture control)				
6.24	Temperature control				For use at controls and not in connection with temperature measurement
6.25	Ventilating fan				
6.26	Engine				To be used in conjunction with other basic symbols