
INTERNATIONAL STANDARD



3789

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Agricultural tractors and machines — Operator's controls — Location and method of operation

Tracteurs et machines agricoles — Commandes — Emplacement et mode de fonctionnement

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up 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.

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.

International Standard ISO 3789 was drawn up by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, and was circulated to the Member Bodies in February 1975.

It has been approved by the Member Bodies of the following countries :

Australia	Finland	Romania
Austria	Germany	South Africa, Rep. of
Belgium	Hungary	Spain
Brazil	Iran	Sweden
Bulgaria	Italy	Switzerland
Canada	Netherlands	Turkey
Chile	New Zealand	United Kingdom
Czechoslovakia	Poland	U.S.A.
Denmark	Portugal	Yugoslavia

The Member Body of the following country expressed disapproval of the document on technical grounds :

France

Agricultural tractors and machines — Operator's controls — Location and method of operation

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the type, location and method of operation (including direction of motion) of the operator's controls for agricultural tractors and machines.

This International Standard applies to the following agricultural equipment: agricultural tractors, self-propelled machines, implements, combinations of tractors, implements and self-propelled machines, and pedestrian-operated machines designed primarily for use in agricultural operations.

NOTES

1 For the purposes of this International Standard, "agricultural" covers horticultural and forestry tractors and machines.

2 The controls included in this International Standard are those which are located at the operator's normal working position, and all controls shall meet the requirements of this International Standard when provided on the machine.

2 REFERENCE

ISO 3767, *Agricultural tractors and machines — Operator's controls symbols*.¹⁾

3 DEFINITIONS

3.1 agricultural tractor : A self-propelled wheeled, track-laying or semi track-laying machine (but excluding any machine in 3.2 or 3.3), primarily designed to pull, push, carry and/or operate trailers, implements and machines used for agricultural work. It may be provided with a loading platform.

3.2 self-propelled machine : A machine, having one or more internal power units which propel and operate the machine, designed to carry out agricultural operations while on the move (but excluding any machine in 3.1 or 3.3).

3.3 pedestrian-operated machine : A machine as defined in 3.1 or 3.2 but normally operated by a pedestrian, and which may also be operated from a seat on an attachment or trailer.

3.4 towed, semi-mounted and mounted equipment : Implements or equipment used in conjunction with agricultural tractors or self-propelled machines.

3.5 right-hand, left-hand and forward : Designations related to the operator when sitting in the operating position.

NOTE — The definitions in 3.1 to 3.5 are presented for information and will be reviewed later.

4 GENERAL

The movement of the control in appropriate circumstances shall be clearly indicated. See ISO 3767.

5 TYPE, LOCATION AND OPERATION OF CONTROLS

The type, location and method of operation of the operator's controls are laid down in table 1 for agricultural tractors and self-propelled machines, and in table 2 for pedestrian-operated machines.

1) At present at the stage of draft.

TABLE 1 – Agricultural tractors and self-propelled machines

No.	Control	Location	Operation
1	ENGINE		
1.1	Starting		It shall be impossible for the engine to be started unless : 1) the traction transmission(s) is (are) in the neutral or park position or 2) the traction clutch is disengaged or 3) the operator is in the operator's seat (station)
1.1.1	Ignition switch (If separate from starter switch)	Easily accessible from the operator's seat.	Move control to "on" position.
1.1.2	Starter switch (If separate from ignition switch)	Easily accessible from the operator's seat.	Move control to start position.
1.1.3	Starter/ignition switch (spark ignition)	Easily accessible from the operator's seat.	Rotate switch in a clockwise direction to positive ignition position. Any auxiliary positions provided shall be located between the "off" and ignition positions.
1.1.4	Starter switch (compression ignition)	Easily accessible from the operator's seat.	Move control to start position. If a rotational switch is provided, rotate clockwise to operate engine starter. If an engine preheater circuit is provided, this control shall occur before the starter position or may be activated by rotating the control counter-clockwise.
1.2	Speed		
1.2.1	Foot-operated	Shall be readily accessible to the operator's right foot and preferably to the right of the brake pedal(s).	Push pedal forward and/or downward to increase engine speed.
1.2.2	Hand-operated	Within easy reach and preferably in front of, or to the right side of, the operator.	The recommended direction of motion of the control is in a plane generally parallel to the longitudinal axis of the propelling vehicle. The direction of motion shall be away from the operator (generally forward or upward) to increase engine speed.
1.3	Stop		
1.3.1	Spark ignition	Easily accessible from the operator's seat.	Rotate starter ignition switch counter-clockwise to "off" (open circuit) position.
1.3.2	Compression ignition	Easily accessible from the operator's seat. Colour of the control or the position "stop" shall contrast with background and any other control.	Move control to stop position. Control shall automatically remain in the stop position without the application of sustained manual effort.