### **INTERNATIONAL STANDARD**

**ISO** 9021

Second edition 2020-03

# M — 1. Motocycles fonctions **Motorcycles and mopeds** — Controls — Types, positions and functions

iotocy
jonctions Motocycles et cyclomoteurs — Commandes — Types, positions et



Reference number ISO 9021:2020(E)



© ISO 2020

plementation, no partanical, includir requested fr All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Contents			Page
Fore	word		iv
1	Scop	oe	1
2	•	native references	
3		ns and definitions	
4		eral requirements	
	4.1 4.2	Type and position	
	4.3	Access	
	4.4	Identification	
	4.5	Orientation and directions	
	110	4.5.1 Right side/left side	
		4.5.2 Forward (in relation to the handlebars)	
		4.5.3 Clockwise/anticlockwise	
5	Indi	vidual requirements	4
	5.1	Electrical controls	
		5.1.1 Ignition switch/main switch	
	5.2	Engine controls	
		5.2.1 Starting	
		5.2.2 Speed	
		5.2.3 Stop	
	5.3	Brakes	
		5.3.1 Front (wheel) brake	
		5.3.2 Rear (wheel) brake	
		5.3.3 Combined service brake	
	г 4	5.3.4 Parking brake	
	5.4	Transmission	6
		5.4.1 Clutch 5.4.2 Gear selection	
	5.5	Lighting and signalling controls	
	5.5	5.5.1 Horn (audible warning device)	
		5.5.2 Lighting	γ
		5.5.3 Direction-indicator switch	8
		5.5.4 Hazard warning signal	8
	5.6	Fuel supply controls	9
		5.6.1 Cold starting device (manual choke)	9
		5.5.4 Hazard warning signal Fuel supply controls 5.6.1 Cold starting device (manual choke) 5.6.2 Manual fuel shut-off control (manual fuel shut-off valve)	9
Ann	ex A (no	ormative) Controls, indicators and tell-tales for which (when fitted)	
	iden	tification is mandatory, and symbols to be used	10
Ann	e <b>x B</b> (in	formative) Control for electrically propelled motorcycles and mopeds	11
		ıy	
DIUI	iogi api	IY	13

#### **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 <a href="https://www.iso.org/directives">www.iso.org/directives</a>).

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 <a href="https://www.iso.org/patents">www.iso.org/patents</a>).

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

For an explanation of the voluntary nature of standards, 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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 38, *Motorcycles and mopeds*.

This second edition cancels and replaces the first edition (ISO 9021:1988), which has been technically revised.

The main changes compared to the previous edition are as follows:

- the scope has been expanded to mopeds, and the second edition of ISO 4151:1987 which was technically revised has been integrated, and
- new controls have been added due to technology changes.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

## Motorcycles and mopeds — Controls — Types, positions and functions

#### 1 Scope

This document describes the types, positions and functions of the rider-operated controls on a motorcycle/moped<sup>1)</sup>, in order to facilitate use.

Annex A specifies controls, indicators and tell-tales for which identification is obligatory and the appropriate graphical symbols. Annex B provides the information for applying for electrically propelled motorcycle/moped<sup>1)</sup>.

This document applies to those controls which, when fitted, are commonly used by the rider of a motorcycle/moped.

The definition or specification of a control does not signify the mandatory presence of each and every control listed in this document on a vehicle.

#### 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 6727, Road vehicles — Motorcycles and Mopeds — Symbols for controls, indicators and tell-tales

#### 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:

- ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>
- IEC Electropedia: available at <a href="http://www.electropedia.org/">http://www.electropedia.org/</a>

#### 3.1

#### vehicle

motorcycles and mopeds as defined in ISO 3833 but not including a steering wheel type

#### 3.2

#### device

element or assembly of elements used to perform one or more functions

#### 3.3

#### control

*device* (3.2) operated by the rider to obtain functions for which the different mechanisms of the *vehicle* (3.1) are designed

EXAMPLE Accelerator, brake, etc.

<sup>1) &</sup>quot;motorcycle/moped" as defined in ISO 3833 but does not include a steering wheel type.