

First edition
2013-05-01

AMENDMENT 2
2018-12

**Impact test procedures for road
vehicles — Seating and positioning
procedures for anthropomorphic test
devices — Procedure for the WorldSID
50th percentile male side-impact
dummy in front outboard seating
positions**

AMENDMENT 2

*Procédures d'essai de choc pour véhicules routiers — Procédures
d'installation et de positionnement des dispositifs d'essais
anthropomorphes — Procédure pour le mannequin WorldSID, 50ème
percentile homme, de choc latéral pour positions de conducteur et
passager avant droit*

AMENDEMENT 2



Reference number
ISO 17949:2013/Amd.2:2018(E)

© ISO 2018

STANDARDSISO.COM : Click to view the full PDF of ISO 17949:2013/Amd 2:2018



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

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

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 www.iso.org/directives).

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 www.iso.org/patents).

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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 36, *Safety and impact testing*.

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 www.iso.org/members.html.

STANDARDSISO.COM : Click to view the full PDF of ISO 17949:2013/Amd 2:2018

Impact test procedures for road vehicles — Seating and positioning procedures for anthropomorphic test devices — Procedure for the WorldSID 50th percentile male side-impact dummy in front outboard seating positions

AMENDMENT 2

5.3

Replace 5.3 with the following:

5.3 Procedure for the test seat placement

5.3.1 Positioning of the test seat

The control which provides the largest range for an adjustment should be considered as the primary control for that adjustment.

- 1) Use the seat control that primarily moves the seat vertically to adjust the rearmost seat reference point defined in 5.2 (a) to the uppermost vertical location.
- 2) Use the seat control that primarily moves the seat fore-aft to adjust the rearmost seat reference point defined in 5.2 (a) to the rearmost location.
- 3) Determine and record the range of angles of the seat cushion pitch referring to the line defined in 5.2 (a) and using only the control(s) that primarily adjust(s) the cushion pitch, set cushion pitch as close as possible to the mid-angle.
- 4) Use the seat control that primarily moves the seat vertically to adjust the rearmost seat reference point defined in 5.2 (a) to the lowest vertical location. Verify that you are still at the rearmost seat track location. Record the X position.
- 5) Use the seat control that primarily moves the seat fore-aft to adjust the rearmost seat reference point defined in 5.2 (a) to the forward most location. Record the X position.
- 6) Measure and mark an X position 20 mm rearward of the midpoint (MP + 20 mm).
- 7) Use the seat control that primarily moves the seat fore-aft to adjust the rearmost seat reference point defined in 5.2 (a) to the X position marked in step 6 (-0/+2 mm) or, if not possible, to the first X possible position rearward the marked position in step 6. If the seat cannot be placed at exactly 20 mm rearward of the midpoint, select next closest available rearward setting.

NOTE For some vehicles, step 7 could change the cushion pitch as established in step 3; this is acceptable.

- 8) Record the test seat position [for example, recording the position of the rearmost reference point defined in 5.2 (a)].

5.3.2 WS50 H-point determination

- 1) Using only the controls that move the seat fore-aft, return the test seat to the rearmost position to facilitate placement of the SAE H-point manikin.
- 2) Place the SAE H-point manikin in the seat and position the seat to the test position recorded [see 5.3.1(8)].

- 3) Follow the procedure as described in SAE J 826 except that the length of the lower leg and thigh segments of the SAE H-point manikin shall be adjusted to the 50th percentile (418 mm) and 10th percentile (408 mm) positions, respectively.
- 4) Set the seat back angle to the angle specified by the manufacturer. If the seat back design angle is not specified by the manufacturer, set the seat back angle to 23° ($\pm 1^\circ$) or as close to 23° as possible (as measured by the SAE H-point manikin).
- 5) Record the H-point X, Y, and Z coordinates.

STANDARDSISO.COM : Click to view the full PDF of ISO 17949:2013/Amd 2:2018