

# JIS

JAPANESE  
INDUSTRIAL  
STANDARD

Translated and Published by  
Japanese Standards Association

---

---

**JIS D 5716** : 2016

**Emergency escape tools for automobile**

---

ICS 43.040.20

Reference number : JIS D 5716 : 2016 (E)

PROTECTED BY COPYRIGHT

9 5

D 5716 : 2016

Date of Establishment: 2016-09-20

Date of Public Notice in Official Gazette: 2016-09-20

Investigated by: Japanese Industrial Standards Committee  
Standards Board for ISO area  
Technical Committee on Road Vehicles

---

JIS D 5716 : 2016, First English edition published in 2017-02

Translated and published by: Japanese Standards Association  
Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

---

In the event of any doubts arising as to the contents,  
the original JIS is to be the final authority.

© JSA 2017

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

AR/HN

PROTECTED BY COPYRIGHT

## Contents

		Page
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Types .....	2
5	Performance .....	2
6	Appearance, structure, shape and materials .....	3
6.1	Appearance .....	3
6.2	Structure and shape .....	3
6.3	Material .....	4
7	Test methods .....	5
7.1	Hardness test for window breaker .....	5
7.2	Shape and size test of seatbelt cutter .....	6
7.3	Low and high temperature resistance test .....	6
7.4	Temperature/humidity cycle test .....	6
7.5	Seatbelt cutting test .....	7
7.6	Window breaking test .....	8
7.7	Impact test .....	9
7.8	Drop test .....	10
8	Inspection .....	10
9	Marking .....	10
10	Instruction manual .....	11

## Foreword

This translation has been made based on the original Japanese Industrial Standard established by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law.

This **JIS** document is protected by the Copyright Law.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

# Emergency escape tools for automobile

## 1 Scope

This Japanese Industrial Standard specifies emergency escape tools for automobile with which passengers can cut seatbelts and break windows to make an emergency escape when immobilised inside automobiles mainly in accidents on the road or in water, except in automobile races (hereafter referred to as escape tools).

Window breaking function is intended for tempered glass, but not intended for laminated glass. This Standard is also applicable to seatbelt cutting function and window breaking function of the escape tools which possess fire extinguishing function.

NOTE : Escape tools can be used for buses and trucks, in which case adequate number of tools should be installed in consideration for the vehicle capacities or other elements.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS D 4604 *Automotive parts — Seat belt*

JIS R 3211 *Safety glazing materials for road vehicles*

JIS Z 2244 *Vickers hardness test — Test method*

## 3 Terms and definitions

For the purposes of this Standard, the following terms and definitions apply.

### 3.1 emergency escape tool for automobile

the tool with which a passenger can cut seatbelt and break tempered glass to make an emergency escape when immobilised inside an automobile

In addition to the above two functions, some tools have fire extinguishing function.

### 3.2 window breaker

point head (of the escape tool) used to hit and break tempered glass

### 3.3 tempered glass

type of sheet glass, used for automobiles, whose dynamic strength has been increased so that the glass can crumble into granules when broken

In this Standard, tempered glass to be broken is simply called “glass”.

NOTE : Tempered glass is mainly used for door window, side window and rear window (see Figure 1).