

Test Code of Slide Door Latch Systems for Automobiles

1. Scope

This standard specifies test procedures for slide door latch systems adapted to the slide doors, which open and close by sliding along the side surfaces of the automobiles and are used for passenger ingress and egress. However, the standard shall not apply to the automobiles for 11 passengers or more, large-sized special motor vehicles, and vehicles with the maximum speed less than 20 km/h.

2. Purpose

This standard aims to standardize test procedures for evaluating the strength required to slide door latch systems in order to keep the doors open at the minimum in automobile accidents.

3. Terminology

Meanings of major terms to be used in this standard shall be as follows:

- (1) **Slide door:** A door which opens and closes by sliding along a side surface of an automobile and has its guiding mechanism on the body (in the condition without doors) and the door.
- (2) **Slide door latch system:** A total system of door holding, including a door latch; striker; male-female hook; locking device; handling mechanism, such as a handle, etc.; and a guiding mechanism.
- (3) **Door latch:** An assembly of the members which are usually attached to the door side, having functional mechanisms, and position the door in a closed position by being engaged with the striker.
- (4) **Striker:** An assembly of the members which are usually attached to the body side, and position the door in a closed position by being engaged with the door latch.
- (5) **Male-female hook:** An assembly of the members which are usually the hooks attached to the front part of the door and the body, and position the door in a closed position by being engaged with each other.

(6) **Fully latched position:** The attitude that exists between the latch and the striker when the door is positioned in the fully closed position.

(7) **Transverse direction:** The direction rectangular to a longitudinal center plane of an automobile.

4. Test Items

Tests shall be done pursuant to either 4.1 or 4.2.

4.1 Strength Test by Body

A test that statically applies a test load in transverse, outward direction, to a slide door latch system attached to a body and a door.

4.2 Strength Test by Jigs

A test that statically applies a test load in transverse, outward direction, to a slide door latch system or its element fixed to jigs.

5. Test

5.1 Strength Test by Body

5.1.1 Condition of Test Vehicle

Conditions of the test vehicle shall be as follows:

- (1) The elements which will not affect the strength may be removed from the slide door latch system attached to the test vehicle.
- (2) Slide door shall be in fully latched position.

5.1.2 Fixing of Test Vehicle

The test vehicle shall be fixed as follows (refer to Fig. 1):

- (1) The test vehicle shall be fixed at the parts which do not affect the strength of the slide door latch system.
- (2) Fixing jigs may be added within the region which have no affection on the strength of the slide door latch system to prevent the fall of the test vehicle.

Reference Standards: JASO B 103 Side Door Strength Test Procedure – Passenger Cars
 JASO B 201 Test Code of Side Door Lock Systems for Automobiles
 JASO B 202 Test Code of Side Door Hinge Systems for Automobiles