



Misuse Test of Load Compartment Cover in the Estate Wagon

1 Introduction

Note: Nothing in this standard supercedes applicable laws and regulations.

Note: In the event of conflict between the English and domestic language, the English language shall take precedence.

1.1 Purpose. This test is to determine the opportunities for misusing the load compartment cover/liftgate trim in the estate wagon or utility vehicle.

1.2 Applicability. Estate wagon or utility vehicle.

1.3 Remarks. Not applicable.

2 References

Note: Only the latest approved standards are applicable unless otherwise specified.

2.1 External Standards/Specifications.

None

2.2 GM Standards/Specifications.

None

2.3 Additional References.

None

3 Resources

3.1 Facilities.

3.1.1 Calibration. The test facilities and equipment shall be in good working order and shall have a valid calibration label.

3.1.2 Alternatives. Alternative test facilities and equipment may also be used. However, all measuring variables as specified in this standard shall be determined correctly with respect to their physical definition.

3.2 Equipment.

3.2.1 Item profile with 300 mm and 500 mm scales.

3.2.2 Steel plate dimensions 160 mm x 260 mm x 5 mm; weight 5 kg.

3.2.3 Two meter (2 m) steel cable (Ø 2 mm) with fastening hooks.

3.2.4 Piston with 20 mm diameter.

3.3 Test Vehicle/Test Piece. Cover load compartment/liftgate trim for estate wagon/utility vehicle.

3.4 Test Time. Not applicable.

3.5 Test Required Information. Not applicable.

3.6 Personnel/Skills. Not applicable.

4 Procedure

4.1 Preparation. The load compartment cover and its fastenings shall meet the release or planned-release status.

4.2 Conditions.

4.2.1 Environmental Conditions. Concrete floor surface. Test temperatures of:

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- $-30\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$
- $23\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$
- $80\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$

4.2.2 Test Conditions. Deviations from the requirements of this standard shall have been agreed upon. Such requirements shall be specified on component drawings, test certificates, reports, etc.

4.3 Instructions.

4.3.1 Pass/Fail Criteria. The parts must be functional after test. Scratches, dents, etc., are allowed if they do not constrict the function.

Cracks and broken parts are seen as a failure.

Also the drop test must be performed with the same part at least two times each.

The load test will be performed with a new set of parts.

To prove capability five (5) parts should be tested for the drop test and two (2) parts for the load test in minimum.

4.3.2 The standing cover shall be allowed to fall from a vertical position as shown in Figure 1.

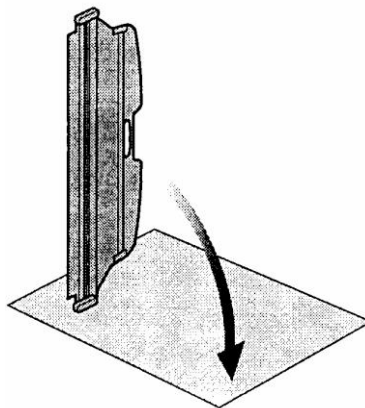


Figure 1: Vertical Fall

4.3.3 The cover shall be dropped in a horizontal position from a height of 500 mm to the ground as shown in Figure 2.

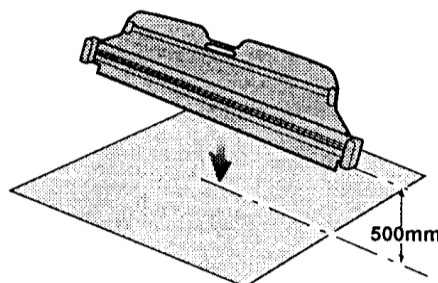
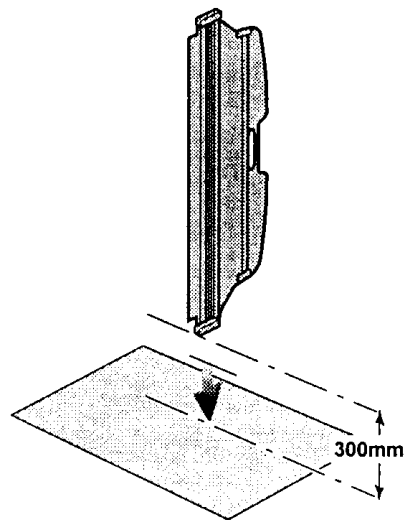
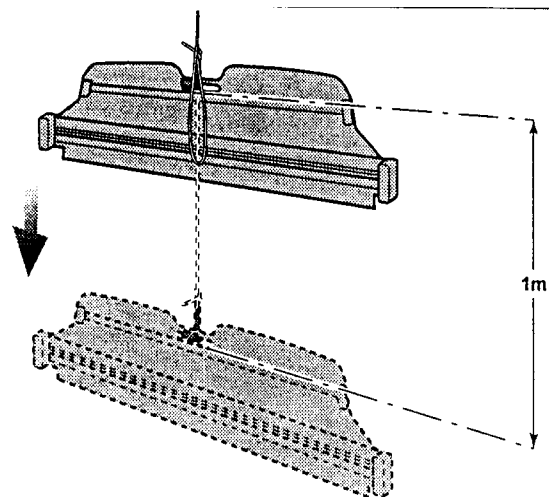


Figure 2: Horizontal Drop

4.3.4 The cover shall be dropped in a vertical position from a height of 300 mm to the ground as shown in Figure 3.

**Figure 3: Vertical Drop**

4.3.5 The cover shall be suspended by a cable from the handle as shown in Figure 4 and then lifted one (1) m. The cover shall then be dropped from this height.

**Figure 4: Suspend then Drop**

4.3.6 The cover is loaded with a steel plate, dimensions are 160 mm x 260 mm x 15 mm; weight 5 kg at the center on two cross rods in installed condition. This load test shall be performed in delivery status and for 24 h in a temperature range of -30 °C to +80 °C. See Figure 5.