

Test of Seat Belt Ass'y – Webbing

KES T – I 028

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1. Scope of Application

This standard shall be applied to passenger cars, MPVs, trucks and buses.

But, this code as an item is based upon FMVSS 571-209 shall regulate test method and requirements about webbing out of Seat Belt Ass'y.

2. Width

2.1 Test method

(1) After leaving three samples in air of humidity 48~67%, temperature $23 \pm 2^{\circ}\text{C}$ for more than 24 hours, test them.

(2) Measure the width by applying tension of less than 5 lbf (2 kgf) for 1 type seat belt webbing and 2200 ± 100 lbf (1000 ± 50 kgf) for 2 type seat belt webbing.

But, in case of 2 type seat belt, measurement is permitted during test of following content 2 "Breaking Strength".

2.2 Requirement

In all seat of adjusting position and all seat back of nominal occupancy position, it should be more than 1.3 in (4.5 cm) except for part not including 95 percentile adult male.

3. Breaking Strength

3.1 Test method

(1) After leaving three samples in air of humidity 48-67%, temperature $23 \pm 2^{\circ}\text{C}$ for more than 24 hours, test them.

(2) Install Split drum grip of diameter 2-4 in (5-10 cm) in the tester and grip separating speed should be 2-4 in/min.

But, gap between grip centers at starting test should be 4-10 in (10-25 cm).

(3) After installing sample to grip, pull consecutively with uniform proportion until webbing breaks.

A : 1 ~ 2 in (2.5 ~ 5 cm)

B : A ~ 0.06 in (0.15 cm)

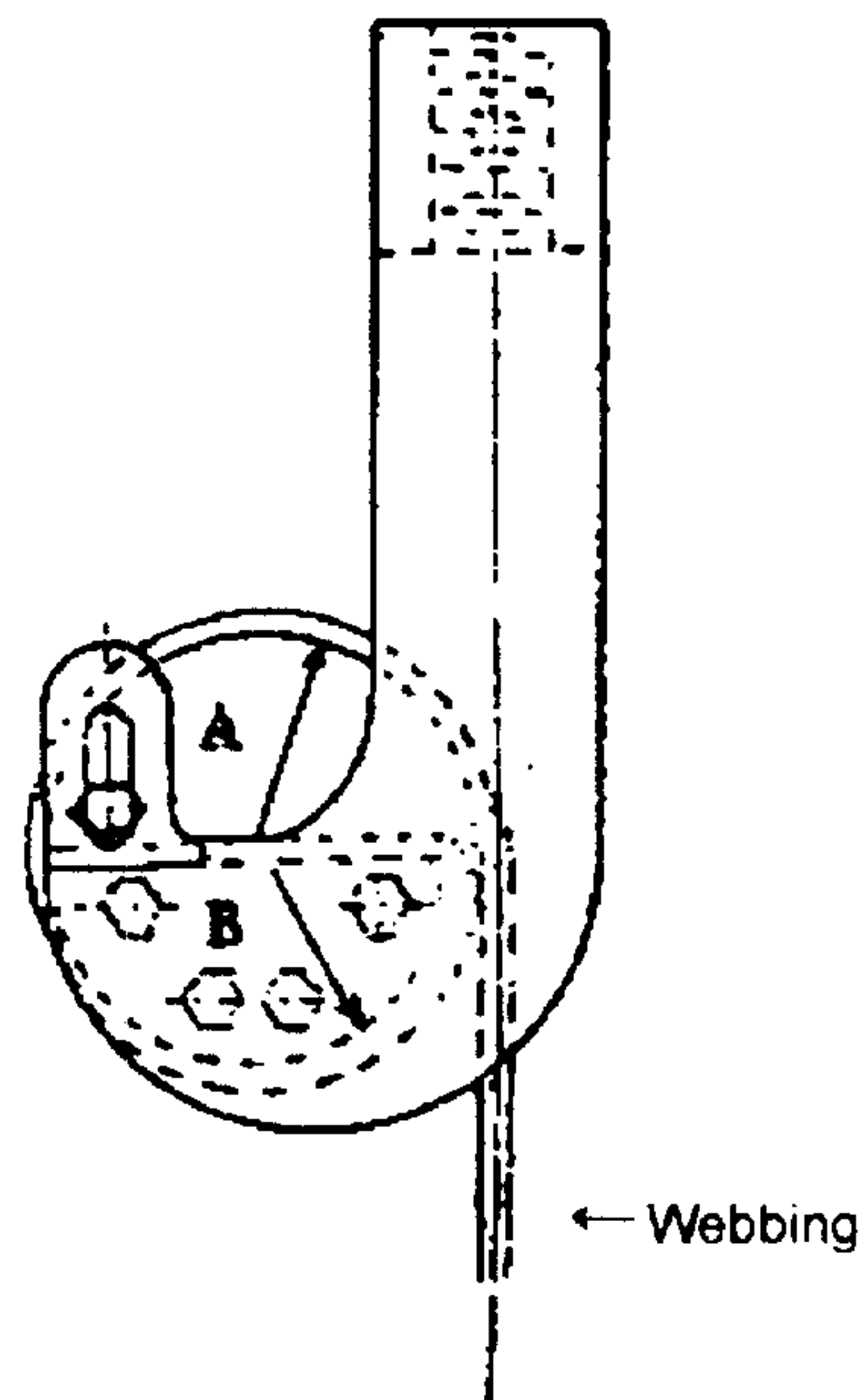


Figure 1 Figure for the test of webbing breaking strength

- (4) It should not be less than required breaking strength but use medium value to determine breaking strength preservation in following content 4 - 6.
- (5) Use tester of suitable capacity having error less than 1 % of range of webbing breaking strength demonstrated according to ASTM E4-79 "Standard Methods of load Verification of Testing Machines".

3.2 Requirements

- 3.2.1 1 type seat belt webbing : Have breaking strength more than 6,000 lbf (2,720 kgf)
- 3.2.1 2 type seat belt webbing : Have breaking strength more than 4,000 lbf (1,810 kgf)

4. Elongation

4.1 Test method

- (1) Measure about 3 samples during the test of "2. breaking strength".
- (2) Apply Preload of 44 ~ 55 lbf (20 ~ 25 kgf) to webbing installed to tester in figure.
- (3) Needle of Extension-meter should keep valence during test and insert so that end of needle is placed at the center of sample.