

(R) SEAT BELT HARDWARE WEBBING ABRASION TEST PROCEDURE

Foreword—This Document has not changed other than to put it into the new SAE Technical Standards Board Format.

1. **Scope**—This SAE Recommended Practice describes a test procedure for evaluating the abrasion resistance characteristics of webbing when used in adjustment hardware of seat belt assemblies such as those described in SAE J140.

2. **References**

2.1 **Applicable Publication**—The following publication forms a part of the specification to the extent specified herein. Unless otherwise indicated the latest revision of SAE publications shall apply.

2.1.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

SAE J140—Seat Belt Hardware Test Procedure

3. **Test Equipment**—Means shall be provided for lengthening and shortening applicable assemblies. Figure 1 illustrates the means and direction of pull on webbing to be used for evaluating tilt-lock type adjustment hardware. For other types of adjustment hardware, modifications may be needed to achieve equivalent results.

NOTE—The directions indicated in Figure 1 are not necessarily intended to duplicate adjustment hardware usage angles. However, the test will provide comparative data on hardware types, webbing types, and combinations designed to be compatible in a system.

3.1 **General**—The seat belt assembly webbing abrasion test shall consist of 2500 cycles.

4. **Test Conditions**—The hardware and webbing shall be conditioned a minimum of 4 h prior to original tensile test and abrasion test at $23\text{ }^{\circ}\text{C} \pm 2\text{ }^{\circ}\text{C}$ and relative humidity of 48 to 67%. All testing shall be conducted under these conditions.

5. **Test Procedure**—Three new seat belt assemblies shall be tested. Use the test equipment described with a length of stroke of 150 to 200 mm (6 to 8 in) and a cycle rate of 16 to 18 cpm. One cycle consists of one lengthening stroke and one shortening stroke.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be reaffirmed, revised, or cancelled. SAE invites your written comments and suggestions.

QUESTIONS REGARDING THIS DOCUMENT: (412) 772-8512 FAX: (412) 776-0243
TO PLACE A DOCUMENT ORDER; (412) 776-4970 FAX: (412) 776-0790
<http://www.sae.org>

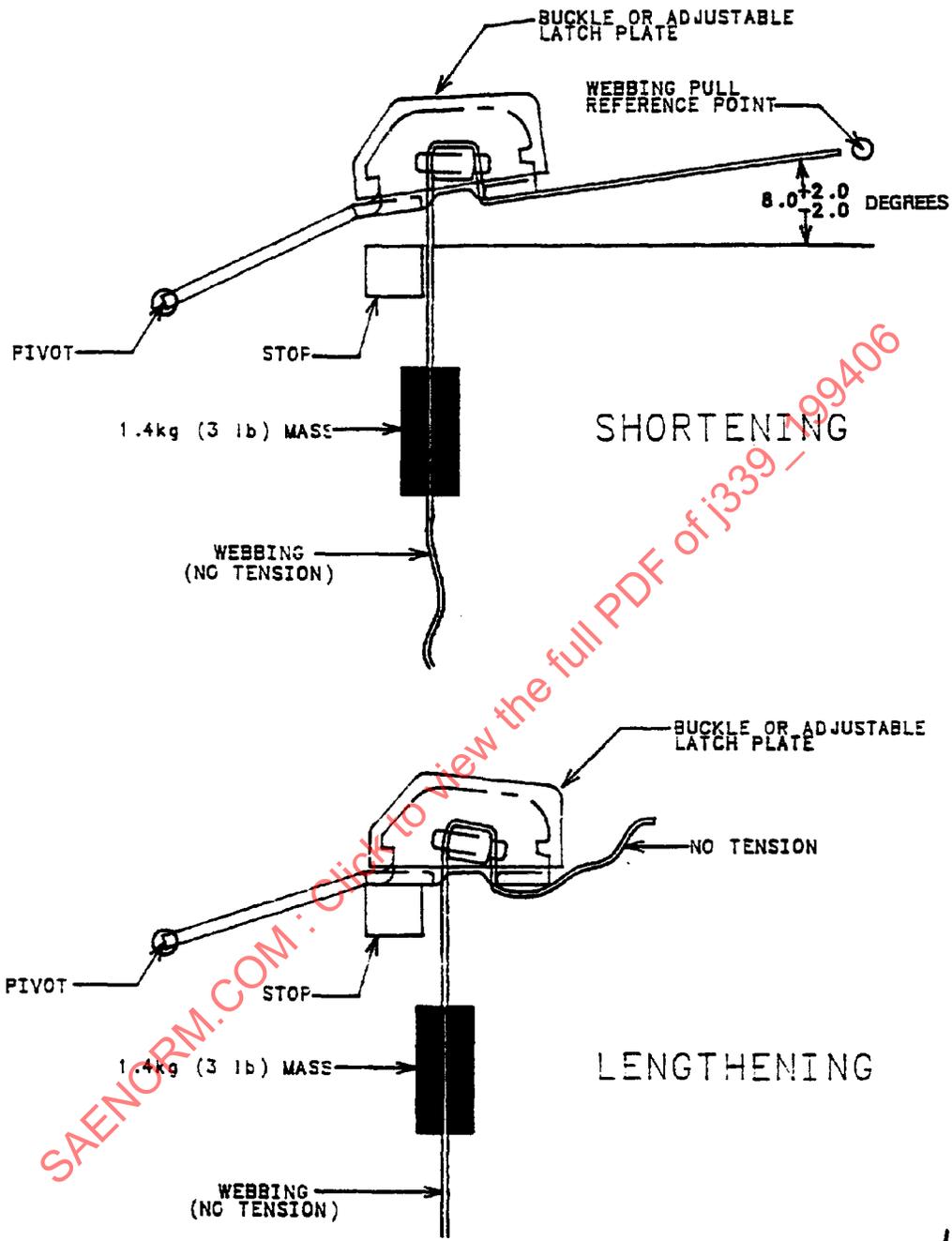


FIGURE 1—WEBBING ABRASION

At the completion of the abrasion test, the following additional tests shall be conducted in the abraded area:

- a. Adjustment Force—Test in accordance with SAE J140, paragraph 4.1
- b. Tilt-Lock Adjustment—Test in accordance with SAE J140, paragraph 4.2 (where applicable)
- c. Webbing Breaking Strength—Test in accordance with SAE J140, paragraph 3.8

6. **Notes**

- 6.1 **Marginal Indicia**—The change bar (I) located in the left margin is for the convenience of the user in locating areas where technical revisions have been made to the previous issue of the report. An (R) symbol to the left of the document title indicates a complete revision of the report.

PREPARED BY THE SAE RESTRAINT SYSTEMS STANDARD COMMITTEE

SAENORM.COM : Click to view the full PDF of j339 - 199406