TEST REPORT
ON
MEDICAL VEHICLES AND THEIR EQUIPMENT

TABLE FOR AMBULANCE STRETCHER

This test report serves to document test results only.
1. Introduction

Upon customers request, TÜV Rheinland Kraftfahrt GmbH has tested a table for an ambulance stretcher. The test was conducted to determine if the maintain systems (restraint systems) and the fixation of the equipment meets the requirements specified under section 3 of this test report.

1.1. Name and address of the customer : PROMEBA, S.L.
   Ctra. C-16, Km 59,5
   08650 Sallent (Barcelona), Spain

2. Description of the test object

Test object : Table for ambulance stretcher
Manufacturer : see 1.1.
Type : PB-440
Technical description : The test was conducted on a table for an ambulance stretcher (stretcher support) manufactured by PROMEBA, S.L.. For details see index of technical description of the manufacturer (see attachment 1).

During the dynamic tests the table was loaded with a rigid stretcher dummy simulating the ambulance stretcher, type PC-650, manufactured by PROMEBA, S.L.. The stretcher dummy is fixed (3 point fixation) to the table by means of two front retention hooks and one rear lock in combination with two self locking traction locks (electric operated stretcher loading function).

The ambulance stretcher, type PC-650, is tested referring the test requirement DIN EN 1789:08.2007. Test result and product features are documented in the Test Report no. 103XS0073-00 issued by TÜV Rheinland Kraftfahrt GmbH.

The stretcher table type PB-440 is - except the manually operated lateral movement (± 148 mm) - a stretcher support with electric operated functions. The product is equipped with following electric operated product features: automatic "loading position", stretcher loading, infinitely adjustment of inclination and Trendelemburg position (± 10°). Product weight is approx. 127 kg. During all tests the setting of the adjustment device for lateral movement was in center position.
3. Test requirements and test facility

3.1. Test requirement

DIN EN 1789:08.2007, Medical vehicles and their equipment - Road ambulances; Sections 4.5.9, 5.3 and 6.3.5.

3.2. Test facilities

- Crash test facility at TÜV Rheinland Kraftfahrt GmbH
- "Inverse Crash"- test facility at TÜV Rheinland TNO Automotive International B.V. (TTAI)

4. Description of test set-up

4.1. Date of tests

2009-11-30, 2009-12-01, 2009-12-09, 2010-03-11, 2010-06-14, 2010-10-07

4.2. Test location

- D-Cologne
- NL-Helmond

4.3. Description of test set-up

The test of the table for an ambulance stretcher with regards to its behaviour in the case of a collision was carried out on a crash test simulation facility. The test object, see section 2. of this report, was installed on the rigid platform of the test trolley and tested dynamically. The movement of the test object during test was determined using high-speed video recording. The accelerations resp. decelerations met the requirements for dynamic tests as defined in section 5.3. of the test requirement.

The test object, see section 2. of this report, was loaded with a stretcher dummy (m=51kg), simulating the PROMEBA ambulance stretcher type PC-650. The stretcher dummy was loaded with a ballast dummy fixed by means of laboratory lashing straps. Following ballast dummies (m=75 kg) were used for the tests:
- ECE-R 16, Annex 7
- Hybrid II (50th percentile, male)

The set-up does not consider the interface with an actual road ambulance floor. The evaluation of the stretcher assembly and the patients restraint system was not objective of the test series.
4.4. Tests carried out

<table>
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<tr>
<th>Test object</th>
<th>Impact direction</th>
<th>Remarks</th>
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<tr>
<td></td>
<td>rearward</td>
<td></td>
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<tr>
<td></td>
<td>transverse left</td>
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<tr>
<td></td>
<td>vertical</td>
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Remark: Due to the design of the test object and its fixation it was not necessary to perform the test in impact direction "transverse right".

5. Test result

The tested table for an ambulance stretcher was strong enough to resist to the load created by the dynamic test. The tested stretcher table or any item attached did not became a projectile or did leave their fixation. The dynamic movement of the test object did not exceed 150 mm in the tested directions. The displacement of the ballast dummy exceeded 150 mm during the individual test.

6. Attachments

1. Foto documentation
2. Index of technical description of the manufacturer

The test report shall be reproduced and published in full by the customer only. It shall however be reproduced partially with the written permission of the testing laboratory TÜV Rheinland Kraftfahrt GmbH only.

January 19, 2011
ps

Dipl.-Ing. P. Scheele
Test Report No. 113XS0008-00

Test object: Table for ambulance stretcher
Type: PB-440
Customer: PROMEBA, S.L.

Foto documentation

Test in forward direction (after test)
Test in rearward direction (after test)
Test in transverse (left) direction (after test)
Test in vertical direction (after test)
Foto documentation

Attachment 1

Stretcher fixation (rear lock)

Stretcher fixation (front retention hook)

Detail; Floor fixation brackets (foot end side)

Detail; Floor fixation brackets (head end side)
Index of technical description of the manufacturer

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<td>Plataforma PB-440, page 6/6</td>
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PROMEBRA stretcher table type PB-440 (early prototype design)
for PROMEBRA ambulance stretcher type PC-650