

1 GENERAL INFORMATION

1.1 SCOPE

This report is intended as a verification of compliance with AS/NZS 4380:2001 Cargo Restraint Systems, for under body load binder manufactured by Transking Innovations Pty Ltd.

1.2 MANUFACTURER

Transking Innovations Pty Ltd
168 Northrock Rd Northrocks NSW 2151
Ph/Fax: (02) 9683 4347 Mobile: 0419 404 788

1.3 TEST FACILITY

The tests specified in this report were conducted by R.K. Findlay Pty Ltd. It is a test facility registered by the Department of Transport and Communications with activities for motor vehicles in areas like ADR inspection and preparation for compliance application.
Test Facility ID: T3308

1.4 INSTRUMENTATION

Load Cell	ST10000KG	<u>Serial No:</u> 4137024
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The load cell has been calibrated by Australian Calibrating Services.

2 IDENTIFICATION OF TEST COMPONENTS

2.1 COMPONENT DESCRIPTION

Name: Transking Tightwinder
Part No.: 769255
Lashing Capacity: 4000kgs

The mechanism is a under body load binder used to secure loads on to the deck of a rigid truck or trailer. The under body load binder utilises a gearing mechanism that gives a mechanical advantage when tightening and securing the load.

3 TEST REQUIREMENTS & PROCEDURE

3.1 TEST REQUIREMENTS

The mechanism is to be tested to withstand a load of 1.25 (A3.2) times the lashing capacity in accordance with Appendix A Performance Testing.

Testing of Pretension ability with a force of 500N applied to a lever of about 400mm in length.

3.2 TEST PROCEDURE

In accordance with clause A3.1 of Appendix A Performance Testing.

4 RESULTS

4.1

Load type	Total load to be applied (kgs)	Max. Load applied to (kgs)
A3.2, 1.25 x LC	5000	7769
A3.3, 500N to Lever	50.97	51

The tests conducted were only to determine the strength in the load binder, not the webbing.

The pretension and release tension test (A3.3 & A3.4) were conducted with a 51kg load applied to 400mm lever. The tension in the webbing was about 740kgs after the 51kg load was applied to the lever. A further test was conducted with a load of 100 kgs was applied to the lever with a tension of about 1450 kgs measured. The mechanism continued to function as intended.

Tested:

Torque applied when 100kgs was applied to 400mm handle= 392.4N.m
51kgs 400mm = 200.1N.m

Option (untested):
50kgs 600mm = 294.3N.m

The untested option of 50kgs at 600mm produced a torque of 295.3N.m which is less than the maximum torque 392.4N.m tested.

4.2 CONCLUSION

The testing of the under body load binder was conducted in accordance with AS/NZS 4380:2001 Motor vehicle-Cargo restraint system-Transport webbing and components.

When the load of 1.25 x LC and beyond was applied to the load binder no permanent deformation or failure occurred and the continued to operate as normal. The load was then increased to above 7700 kgs, which resulted in permanent deformation but continued to hold the load without failure.

The load binder also conformed to the requirements of A3.3 and A3.4 for pretension and release under tension.

An extra load of 100kgs was also applied (51kgs is only required) and the load binder continued to function as intended.

5 CERTIFICATION OF TEST RESULTS

The under body load binder supplied by Transking Innovations Pty Ltd, complies with the Section 3 Performance Requirements Clause 3.3 and 3.4 of AS/NZS 4380:2001.

R.K. Findlay Pty Ltd has no control over the selection of the samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is a true representation of the production units.

Certified by:

I certify that this test report is correct and that the samples covered herein comply with the specified testing documentation.



Signed: _____

9/04/2008

Date: _____

Simon Finianos
Test Engineer
M SAE-A 12525