

PET RESTRAINT SYSTEM

TEST RESULTS

Tests conducted for

Kurgo Products Pet Restraints

Purchase order number: verbal Kitter Spater

TEST NUMBERS: KG 1502

Testing date: September 22, 2015

Child Passenger Protection Research Program
University of Michigan Transportation Research Institute
2901 Baxter Road, Ann Arbor MI 48109

TEST METHODS

The tests were performed on an impact sled located at the UM Transportation Research Institute. The sled operates on a rebound principle, achieving a desired velocity change by reversing its direction during the impact event. The crash pulse is trapezoidal in shape and is similar to that of a small automobile. Sled velocity is monitored immediately before and after impact to compute the overall change in velocity. The FMVSS 213 corridor is shown as a shaded area on the sled deceleration plot when appropriate, and peak deceleration is reported.

The test data are digitized on-line and analyzed on a workstation. All test signals are filtered according to the requirements of SAE J-211, and signal output conforms to the SAE J-1733 sign convention. Photographic equipment includes high-speed (1000 frames per second) digital video cameras from both side and overhead or forward directions. The strobe flash corresponds to time-zero on the plots.

DATA LIMITATIONS AND USE

Results of these tests are advisory in nature and do not constitute endorsement of a product nor certification of its compliance with a government regulation. These data may be used as technical support for self certification by the restraint system manufacturer, and copies of one or more test reports may be provided to interested individuals at that sponsor's discretion. At no time, however, shall the name of the University of Michigan or the University of Michigan Transportation Research Institute be used in any advertising material or public media release in connection with the restraint system tested.

**PET RESTRAINT SYSTEM
TEST DATA SUMMARY**

Test Number: **KG 1502**
Test Date: September 18, 2015

Test Setup: 75 lb surrogate dog restrained by a Kurgo Tru-Fit Smart Harness Enhanced Strength V.3, with the lap and shoulder belts threaded through the carabiner clip.

SET-UP

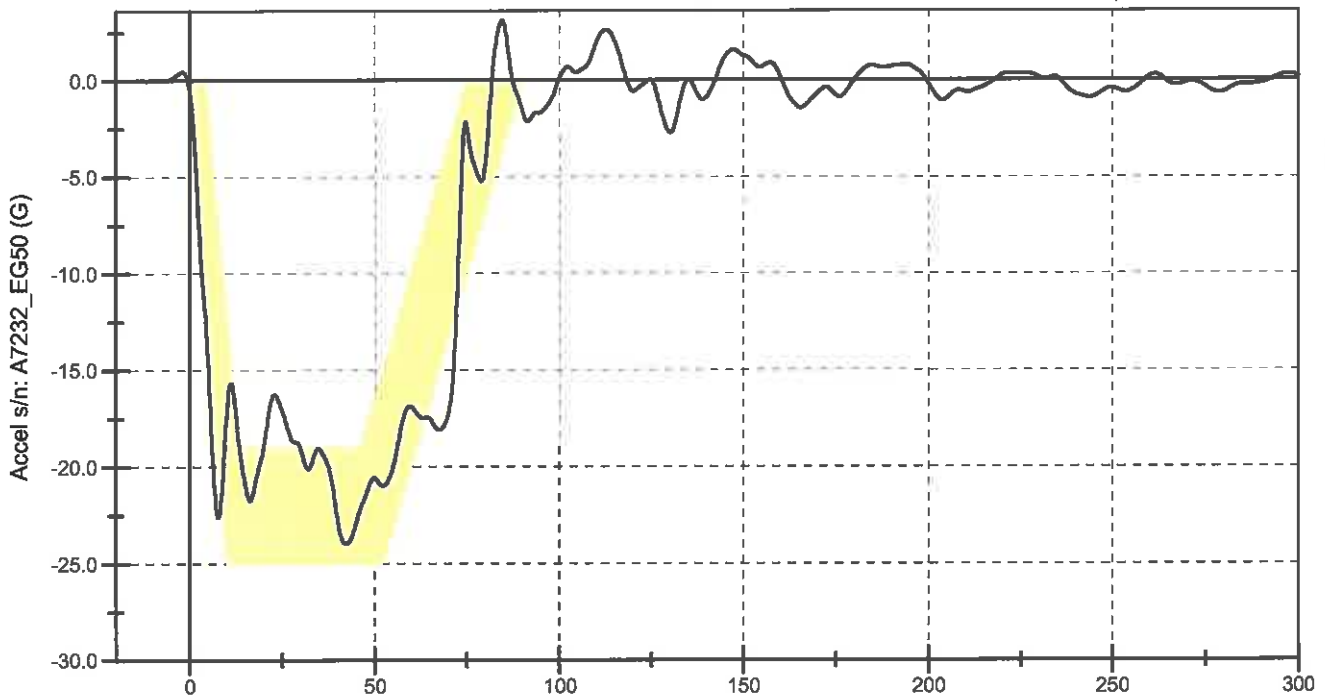
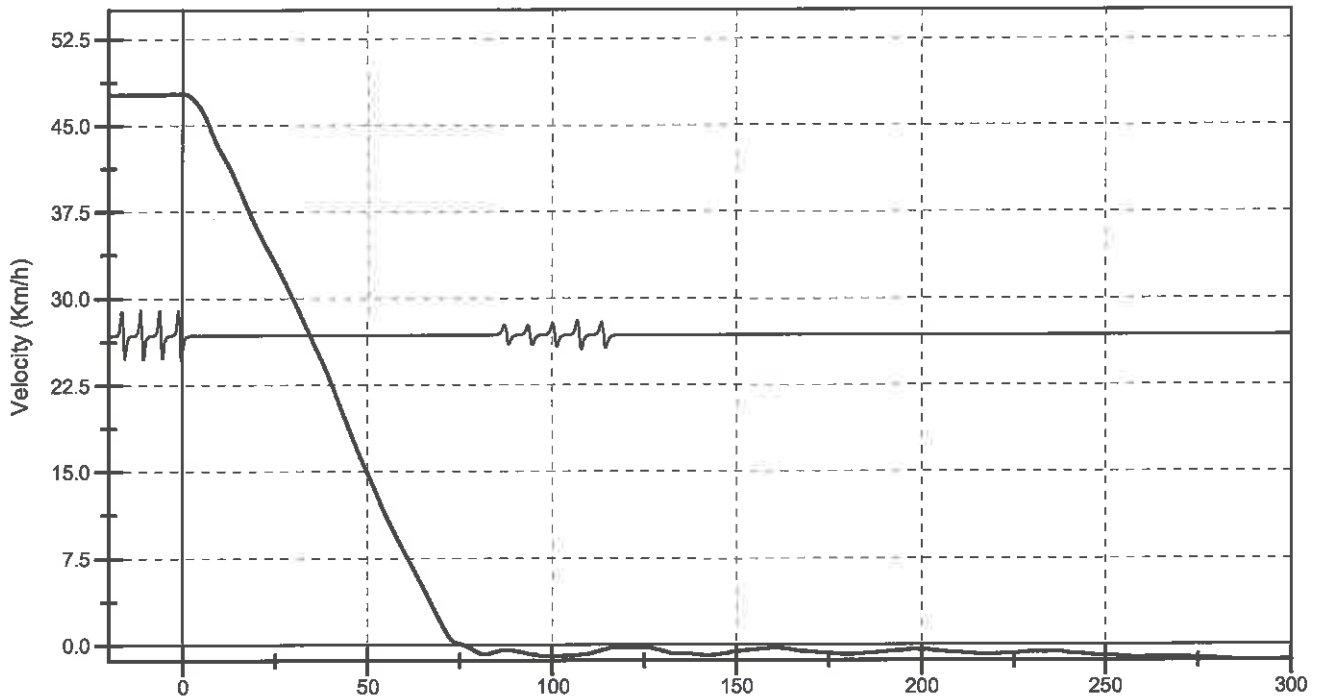
Frontal impact
FMVSS 213 standard seat, version 2005
Fixed seatback
48 km/h (30 mph), 20 G average

RESULTS

Velocity	47.7 km/h	(29.6 mph)
Average Acceleration	19.2 G	
Forward 'Muzzle' Excursion	902 mm	(35.5 inches)

Comments

The harness remained intact so that the dog dummy was restrained to the test bench during the test. Some harness stitching tore where the neck belt attaches at the top of the chest panel (see photo).



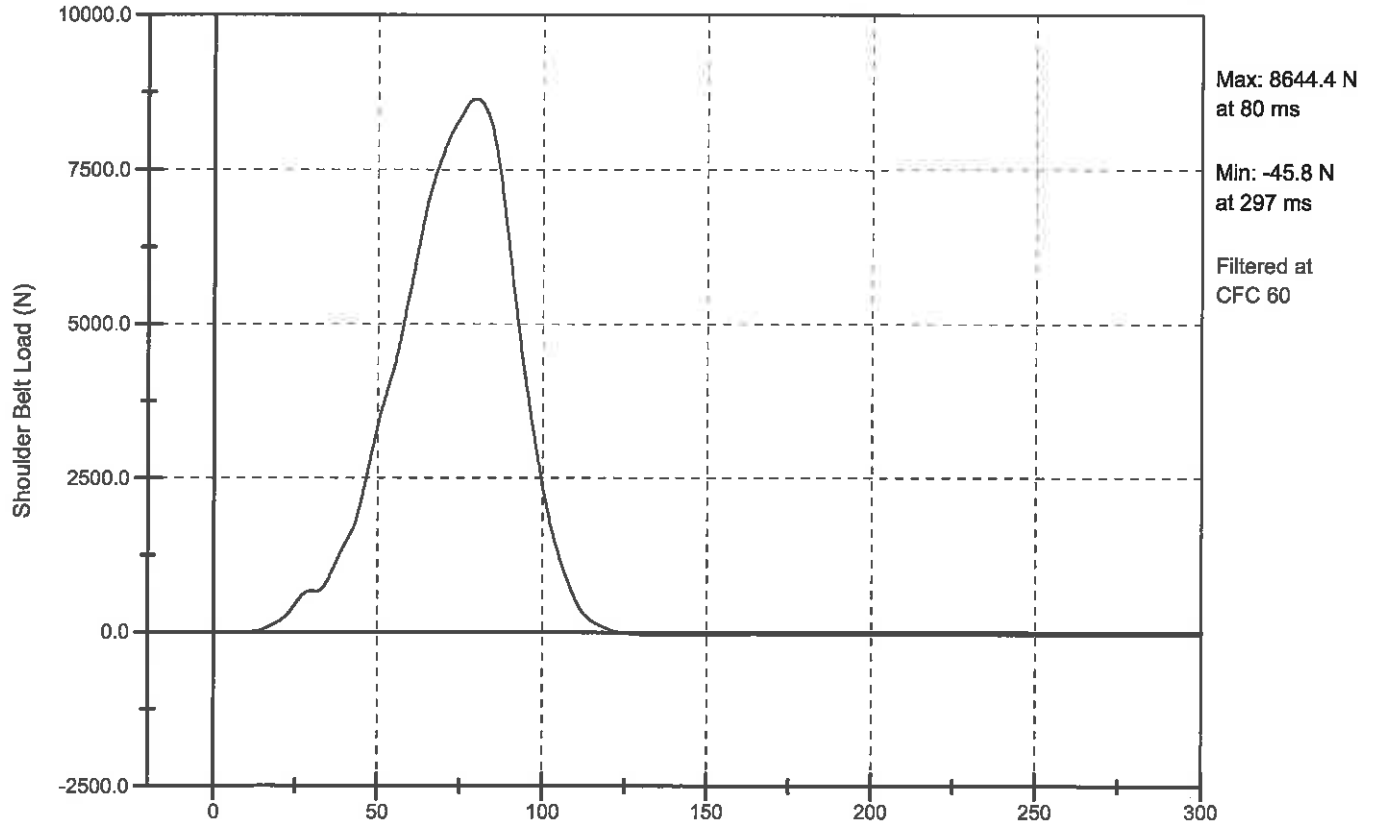
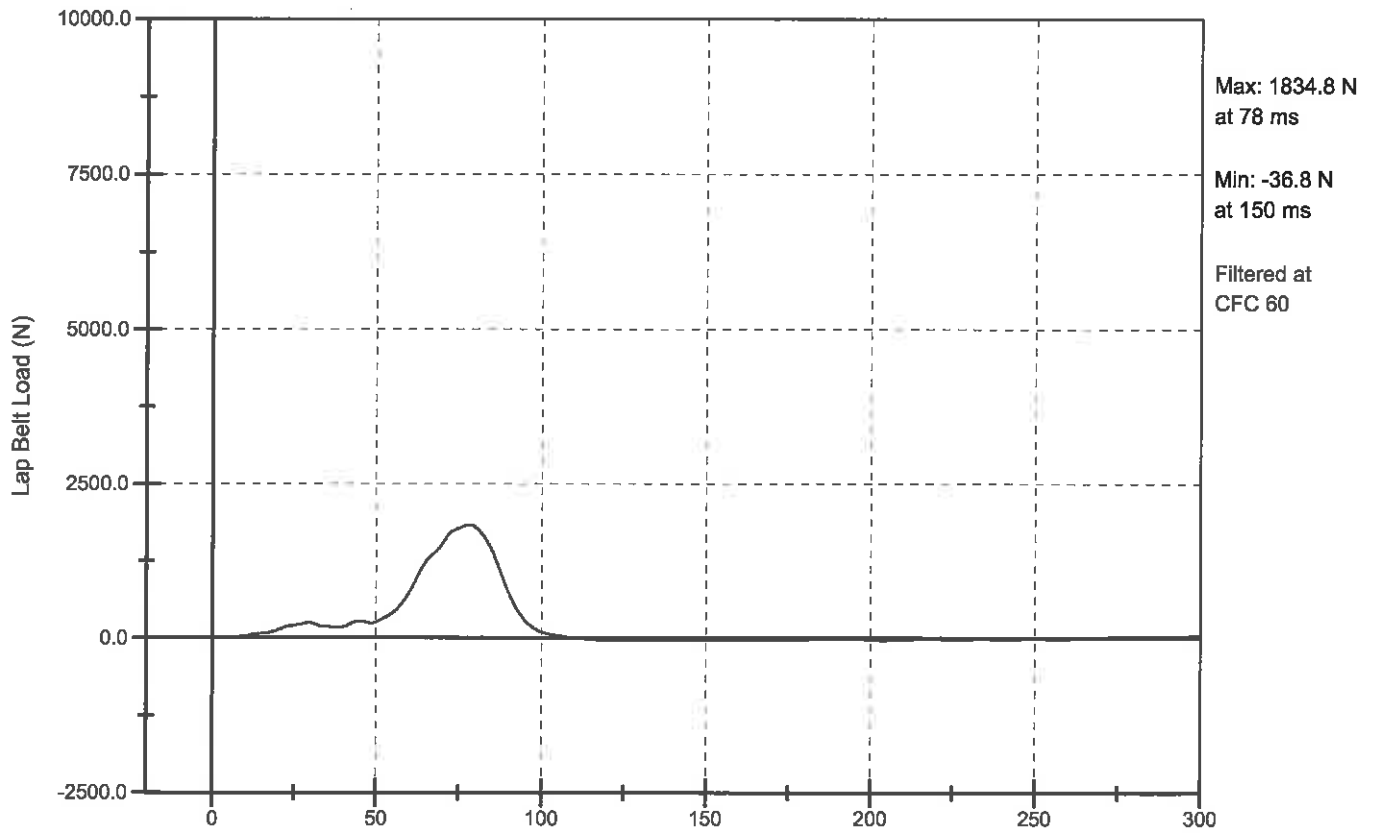
Sled Decel Peak = -24.0 G
Sled Plateau Average Level = -19.2 G
Sled Pulse Duration = 82.0 ms

Stopping Dist. (est) = .585 m
Sled Delta V = 47.7 kph (29.6 mph)
Efficiency = $V_{out} / V_{in} = 20.9 / 26.7 = 78.4\%$

UMTRI

Belt Loads

KG1502







KG1502

1



5



2



6



3



7



4



8



KG1502

1



5

2



6

3



7

4



8







KG1502A