PET RESTRAINT SYSTEM

TEST RESULTS

Tests conducted for

Kurgo Products Pet Restraints

Purchase order number: verbal Kitter Spater

TEST NUMBERS: KG 1501

Testing date: May 18, 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 1501**
Test Date: May 18, 2015

Test Setup: 75 lb surrogate dog restrained by a Kurgo Impact Harness V.1, with the lap and shoulder belts threaded through two webbing loops at the back of the harness.

SET-UP

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

RESULTS

Velocity	**48.9 km/h**	(30.4 mph)
Average Acceleration	**20.5 G**	
Forward 'Muzzle' Excursion	**863 mm**	(34.0 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).

UMTRI	Results	KG1501

Nominal = 30 mph / 20 g
Actual[P] = 47.9 km/h (29.7 mph) (76.8%)

Pressures: 114.3/900
Plateau Avg.= -20.3 G; Peak = -24.6 G

Dummy: Dog Dummy (75 lb kg)
Buck: 213 buck, brace, extensions

Buck Weight: 1910

Kurgo large dog harness
Lap/shoulder belts looped through two webbing loops on back harness

Sled Summary

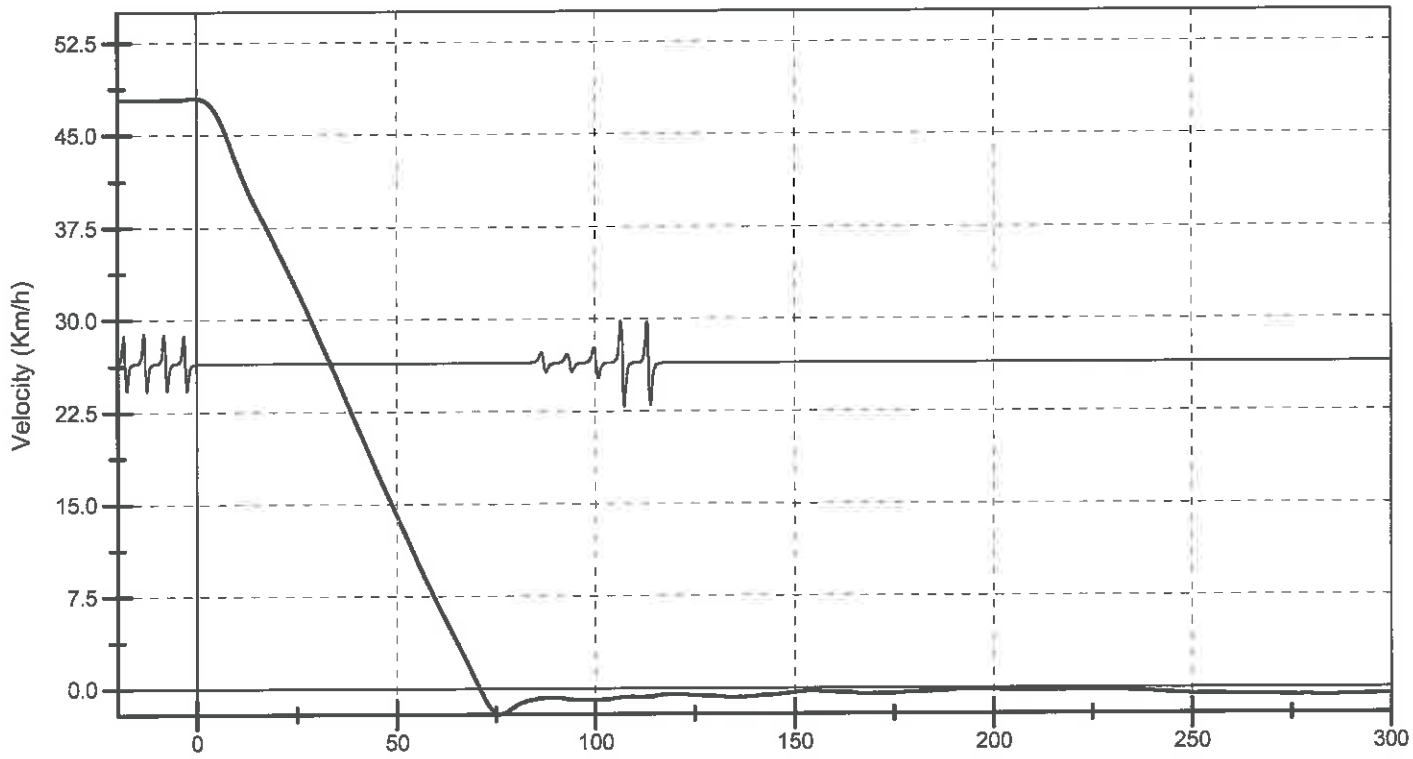
Sled Pulse Duration = 76.1 ms
Sled Plateau Average Level = -20.3 G
Sled Decel Peak = -24.6 G

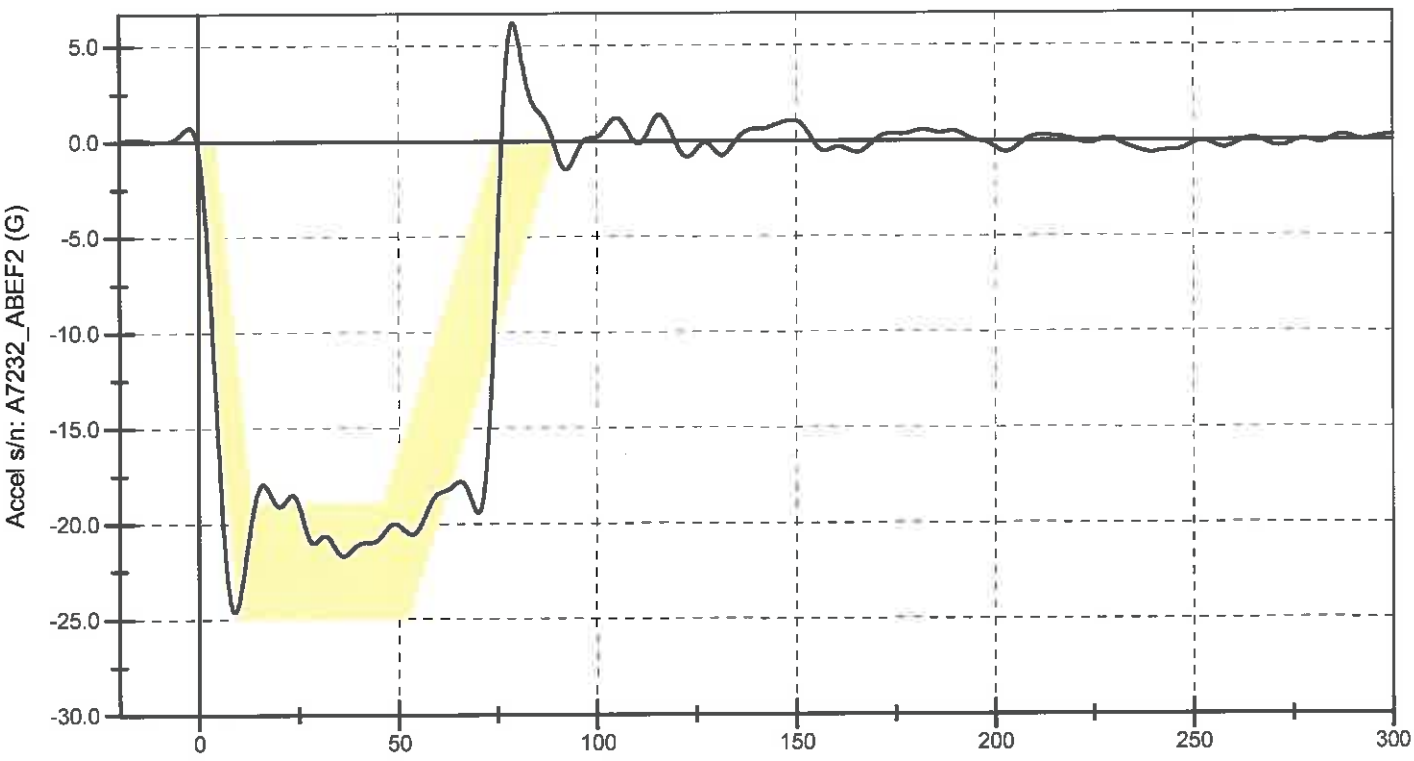
Efficiency = Vout / Vin = 20.8 / 27.1 = 76.8%
Sled Delta V = 47.9 kph (29.7 mph)
Stopping Dist. (est) = .531 m

Belt Loads

Lap Belt Load	-15.7 N (-3.5 lb) @ 193 ms	**2413.4 N (542.6 lb) @ 76 ms**
Shoulder Belt Load	-26.7 N (-6.0 lb) @ 134 ms	**7878.5 N (1771.2 lb) @ 77 ms**

UMTRI Sled Summary KG1501





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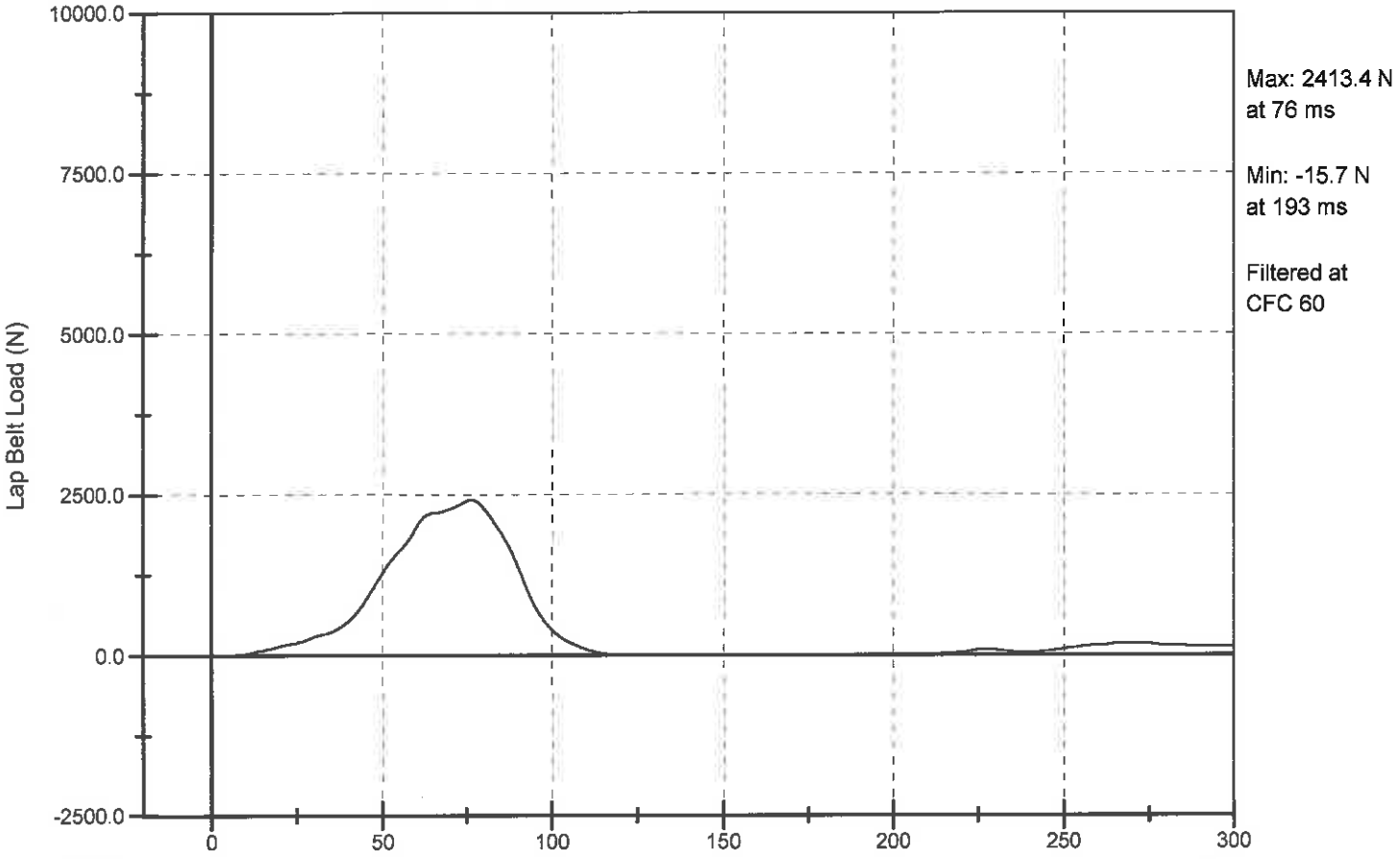
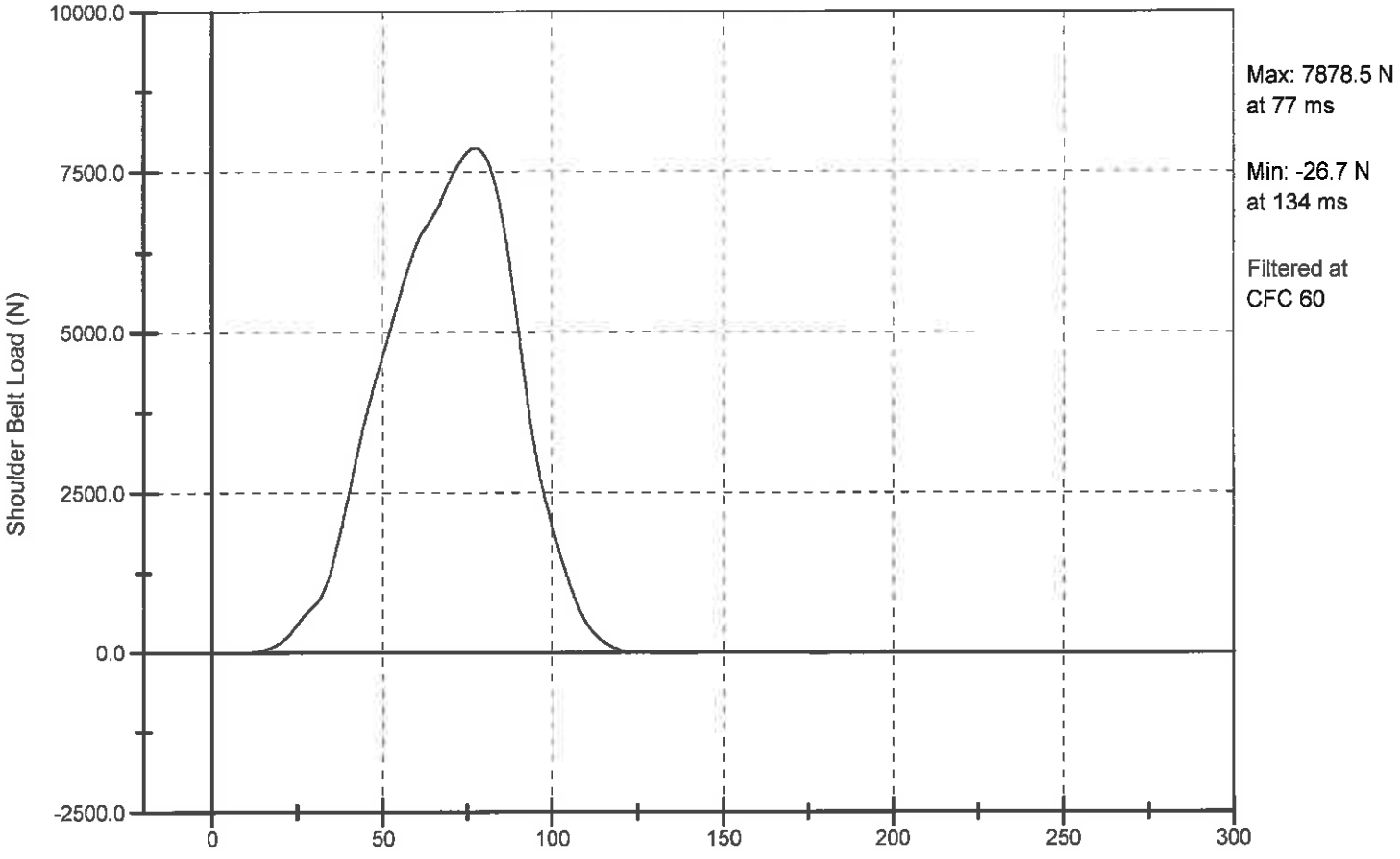
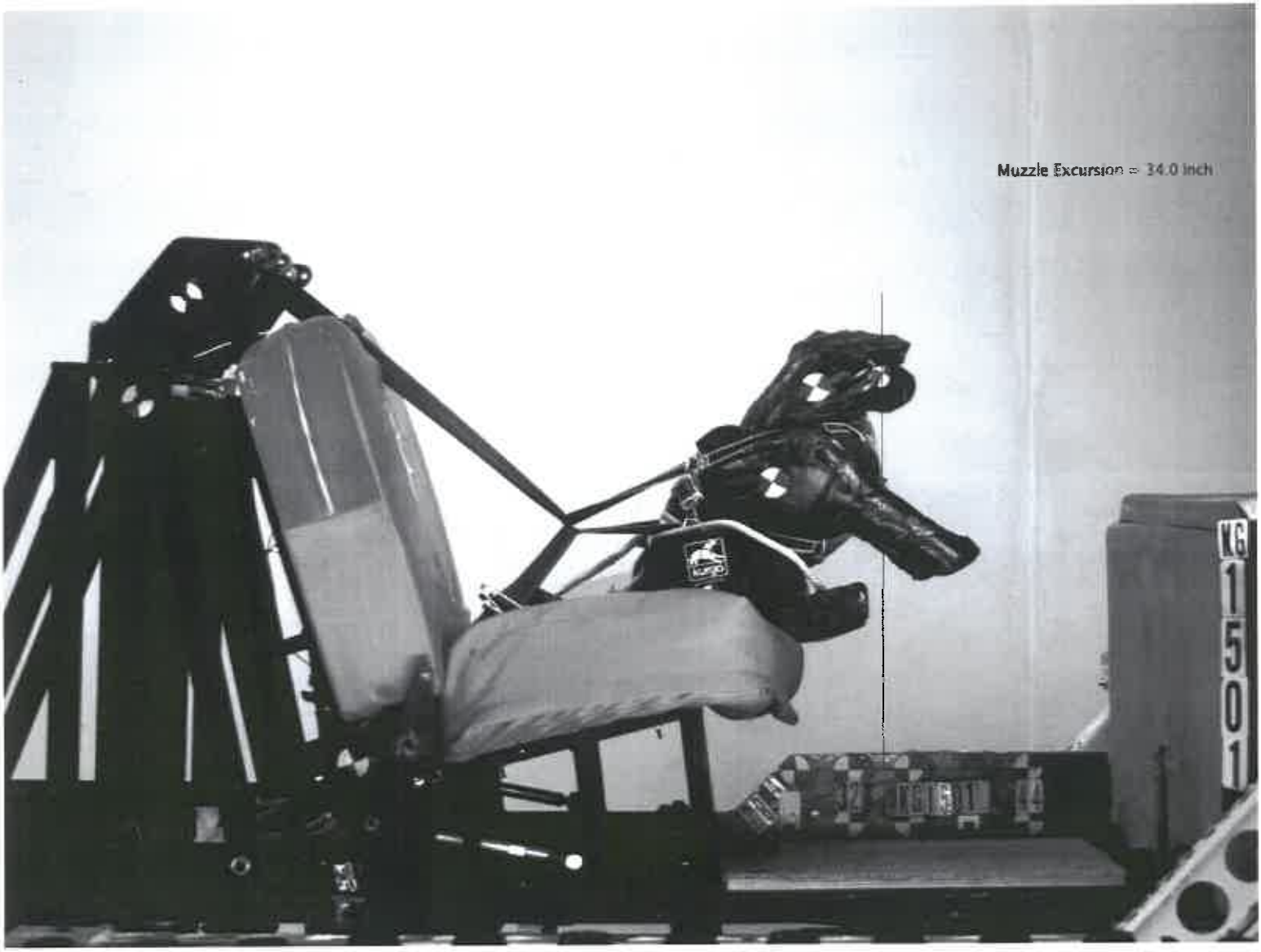
UMTRI Belt Loads KG1501






Muzzle Excursion = 34.0 inch
1501

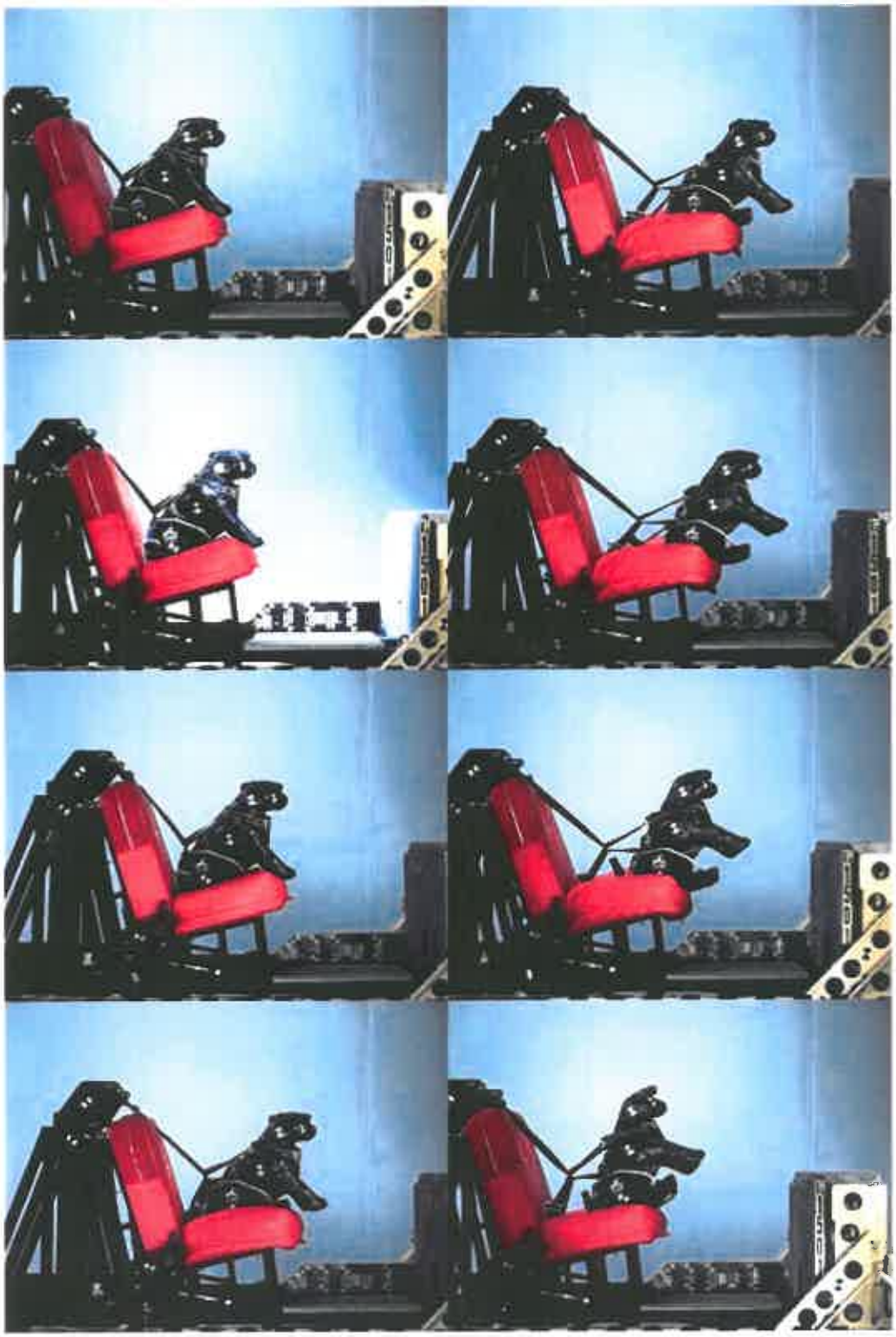

KG1501
32
KG1501
44


KG1501


KG1501


KG1501

KG1501



KG1501

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