

**30 MPH VEHICLE CRASH TEST
OF AN ARMR MODEL 850
PORTABLE / TOWABLE BARRIER**

MGA Reference Number: C03C3-007

Test Date: February 23, 2004

Report Date: March 2, 2004

FINAL REPORT

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SIGNATURE APPROVAL PAGE

Procedure Number: MGA 30 mph Frontal Impact Test Checklist
February 8, 2002

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The results presented in this report relate only to the specified test items.

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SECTION 1
SUMMARY OF TEST

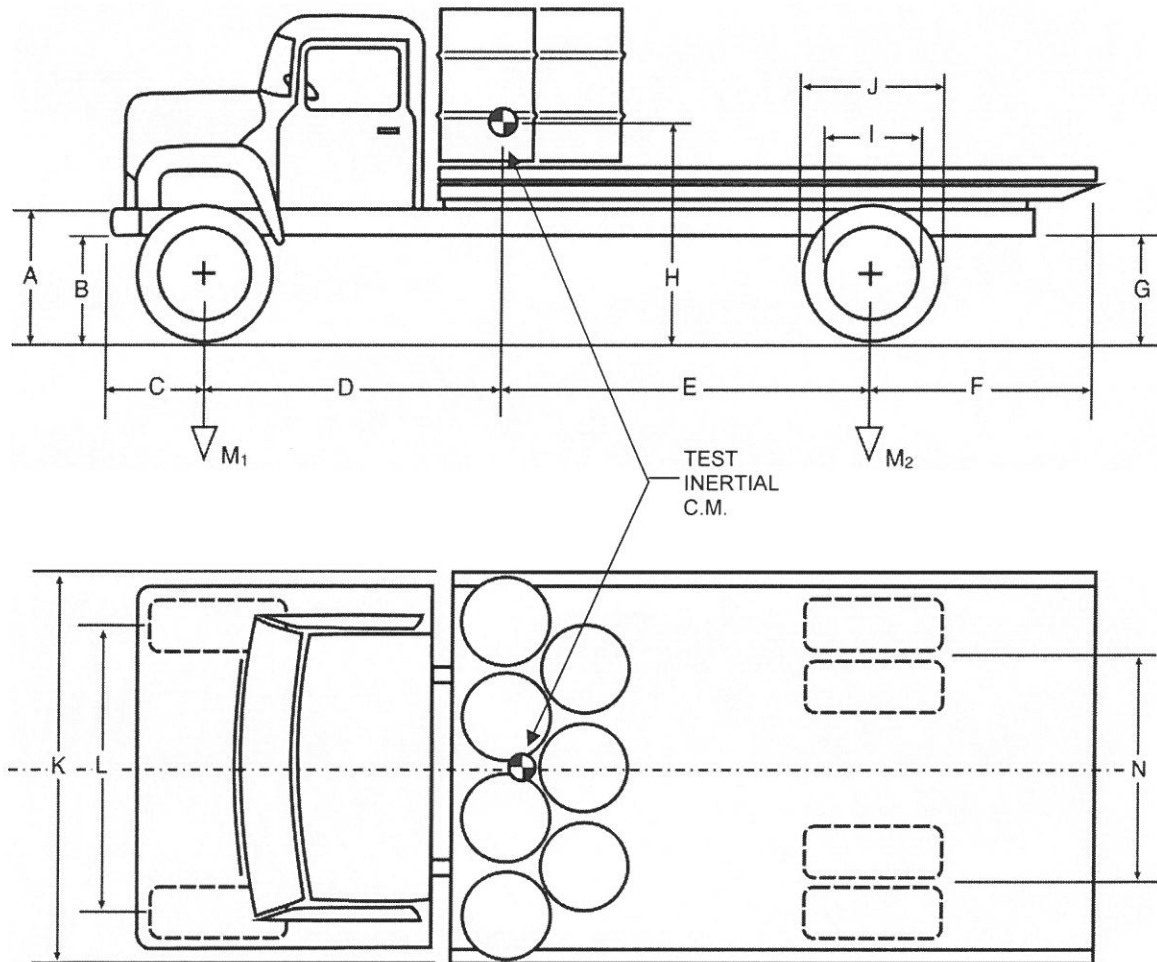
The purpose of this test was to verify the performance of the ARMR Model 850 Portable / Towable Crash Barrier when subjected to a frontal impact of 30 mph (48.3 kph) to the U.S. Department of State, Bureau of Diplomatic Security Standard SD-STD-02.01, Revision A, March 2003.

The barrier was impacted by a 1991 GMC TopKick ballasted to 6805 kg at a velocity of 35.2 kph (29.5 mph) on February 23, 2004. The barrier plate displacement and vehicle bed penetration measurements can be found on page 3.

The impact was documented by one real time and six high speed cameras. Appendix A contains pre and post test photographs of the barrier. Appendix B contains the vehicle data plotted to 0.2 seconds. Appendix C contains the vehicle data plotted to 5 seconds. Appendix D contains the instrument calibration data. Appendix E contains the barrier drawings.

SECTION 2
VEHICLE INFORMATION / DATA SHEETS

Date:	February 23, 2004
Test Number:	04022301
VIN:	1DGJ6H1J5MJ519629
Make:	GMC
Model:	Top Kick
Year:	1991
Odometer:	40,337
Tire Size:	9.00 - 20E



Measurements on the following page

SECTION 2 (CONTINUED)
VEHICLE INFORMATION / DATA SHEETS

GEOMETRY (CM)

A	88
B	51
C	75
D	256
E	234
F	142
G	76
H	160
I	59
J	100
K	244
L	182
N	206

MASS (KG)

M_{Total}	6805
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TEST SPEED (KPH)

Measured Parameter	Value
Test Speed	47.5 (29.5 mph)

VEHICLE AND BARRIER MEASUREMENTS (CM)

Barrier Plate Displacement	1294 (509.5 inches, 42 feet 5.5 inches)
Vehicle Bed Penetration	1058 (416.5 inches, 34 feet 8.5 inches)