

HAVOC TEST REPORT

(Highway and Vehicle Open Air Crash Site)



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REPORT NO :

MIRA-08-1020975-G0085

Legislation :

To support BS 6399-1 :1996

Project No:

1020975

Client:

GME Springs

Test Item:

Received date: 20th October 2008

Tested Date: 21st October 2008

Client Address:

Boston Place, Foleshill

Coventry.CV6 5NN

Telephone No:

+44 (0)2476 664911

E-mail address:

rg@gmesprings.co.uk

Client Liaison Engineer:

Rob Gerrard

TEST PROCEDURE

Target Data:

Speed (km/h)	16 +/- 2	Angle (deg)	90 +/- 2	Mass(kg)	1500 +/- 40
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Test Article Installation Description:

The system consisted of 4 posts at 1.6m spacing. Each post was inserted into a slipper box concreted in the ground. The barrier front was manufactured from spring steel with an eye rolled into each end, this formed a hinge when joined together using a 30mm bolt, to make a longer barrier run. The front beam was fitted to the posts with a 16mm U-bolt. The centre of the barrier front beam was 445mm from the ground. The impact point of the barrier was designated to be the last post of the 5m span, to demonstrate a worst case impact scenario on a single post of the barrier system.

Test Vehicle:

Model:	Ford Mondeo	Year:	-		
Registration No:	N810 VAB	VIN:	-		
Mass Front(kg):	878	Mass Rear (kg):	626	Mass Total (kg):	1504
Ballast Position & Mass:	Sand bags in LHF and both rear foot-wells				

RESULTS

Test Details:

Test No:	G0085	Date:	21 st October 2008 14:25		
Weather Conditions: Clear blue sky					
Air Temperature (°C):	10	Rainfall Test Day(mm):	0	Wind speed (m/s):	4.7
Impact Speed (km/h):	23.1	Impact Angle (deg):	90	Deflection	585mm

The test vehicle impacted the designated impact point on the barrier 100mm towards LHS. Dynamic deflection of the front face of the barrier was measured as being 585mm. The maximum dynamic deflection recorded from the impacted post was 433mm (back face of post). The vehicle rebounded from the barrier at a speed of 9.4km/h. Damage to the barrier face consisted of minor scuff marks on the horizontal section. The end post returned within 220mm of its original position. Damages to the vehicle were limited to the bonnet, bumper / bumper foam and the radiator.



This report is complimented by report MIRA-08-1020975-G0084 (impact point on mid-span of the installation at 16km/h)

List of Enclosures:

Enclosure 1: Technical Drawings of Test Article and Installation
Enclosure 2: Still Photographs of Vehicle and Test Article Before and After Test

General Statements

The test results in this report relate only to the items as tested. Other impact conditions may give different results. This report may not be reproduced other than in full, except with the prior written permission of the issuing laboratory.

	Name	Position	Signature	Date
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Concurred By	J. Gleave	Manager, Safety Development		03-12-08

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