# Crash Tests





Overall score

25.38 out of 37 Eng:1.4 litre.

Kerb weight: 1080 kg Vehicles built: 2003

Variant: Exclusive 5dr hatch

Category: SMALL CAR Test by Euro NCAP

**Important note**: The European model was tested by EuroNCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

#### Model History and Safety Features

The Mazda 2 was introduced in Australia during 2003. The Maxx and Neo variants in Australia are similar to the Exclusive variant tested by Euro NCAP. Dual front airbags are standard equipment. Side airbags, head-protecting side curtains are optional on the Maxx and Neo and standard on the Genki from December 2003. ABS brakes are standard on the Genki variant.

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point seat belt.

### **OVERALL EVALUATION : 4 Stars**

The Mazda 2 scored 11.33 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver. Protection from serious chest injury was marginal for the passenger

The vehicle scored 14.05 out of 16 in the side impact crash test. There was a slight risk of serious pelvis injury for the driver.

## FRONTAL OFFSET CRASH TEST

*Body region scores out of 4 points each*: Head/neck 4pts, chest 2.66pts, upper legs 2pts, lower legs 2.67pts.

The passenger compartment held its shape well in the offset crash test. The clutch pedal moved rearwards by 128mm and there was no displacement upwards. The steering wheel hub moved rearwards 16mm and downwards 7mm. The front ("A") pillar moved 27mm rearwards. The width of the driver's doorway shortened by 18mm. All doors remained closed during the crash. After the crash extreme manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. Steering column components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag.

### SIDE IMPACT CRASH TEST

*Body region scores out of 4 points each*: Head 4pts, chest 4pts, abdomen 4pts, pelvis 3.05pts. Modifier: 1pt deduction for partial unlatching of rear door.

Euro NCAP also tested a Mazda 2 with head-protecting side curtains. That variant was eligible for an optional pole impact test. The manufacturer decided to go ahead with the pole test



Offset crash test at 64km/h

but head protection was poor and the vehicle did not earn a further two points.

## **INJURY MEASUREMENTS**

Refer to the informatio sheet "How the test ar done"			Side Impact Crash Test at 50km/h (v4)
	Driver	Passn	Driver
Head HIC	236.1	-	134
Acceleration (g for 3ms)	41.4	26.9	53.5
Neck - Shear (kN)	0.52		
Tension (kN)	1.33	0.76	-
Extension (Nm)	11.2	16.66	-
Chest Accln (g for 3ms)			-
Compression (mm)	25.83	31.39	19.44
Viscous criterion (m/s)	0.12	0.21	0.25
Abdomen - Force (kN)	-	_	0.56
Pelvis - Force (kN)	-	-	3.71
Upper legs Force Left	0.53	0.01	
(kN) Righ	nt 1.29	1.54	
Knee displ (mm) Left	0.62	0.23	
Righ	nt 0.19	1.78	
Lower legs Force Left	2.26	1.73	
(kN) Righ	nt 1.52		
Index (Upper/Low) Left	0.699/0.39	0.39/0.21	
Righ	nt 0.49/0.32	0.29/0.19	

#### Bonus points (maximum 5)

Pole Test: Not eligible Seat belt reminders: Not eligible

Modifiers for offset test scores				
Head		No deduction		
Chest		No deduction		
Upper leg Drv, variable & conc. loading		2 pt deduction L & R		
Passn	2pt L, 1pt R			
Lower leg Foot score	Pedal reward displ.	No deduction Score 2.88 points		
		P		

Pedestrian rating (v4)

10.11 points out of 36

Child head impacts 6.11pts; adult head impacts 4pts; upper leg 0pts and lower leg impacts 0pts.



### December 2003

Published by New Car Assessment Program PO Box 1555 Canberra ACT Australia 2601

mazda2\_03.doc revised 19-Jan-04