

# Crash Tests

## New Car Safety

### Mazda 6

07/2005 on 06/2007 - Frontal+Side+Head

#### Overall Evaluation



#### Overall Score

Variant: 5 Dr Hatch

28.2 out of 37

Engine: 2 Litre

Category: Medium Car

The left-hand-drive European model was tested by Euro NCAP. 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 upgraded model of Mazda6 was introduced in Australia during 2005.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. ABS/EBD brakes are also standard. Advanced seat belt reminders are fitted to all seats in Europe (earning three bonus points) but are not currently available in Australia.

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. Pre-tensioners 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

The Mazda6 scored 11.71 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal for the driver.

The vehicle scored 14.49 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver. A further 2 points were scored in the optional pole test.

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 2 pts, upper legs 2 pts, lower legs 3.47 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 57 mm and upwards 40 mm. The steering wheel hub moved forwards 1mm, downwards 10mm and sideways 26 mm. The front ("A") pillar moved 43 mm rearwards. All doors remained closed during the crash.

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 4 pts, chest 3.02 pts, abdomen 3.47 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

#### Pedestrian rating (v4.1)



Total (out of 36)	5.21
Child head impacts	4.09
Adult head impacts	0.02
Upper leg impacts	1
Lower leg impacts	0.1

Offset crash test at 64km/hr



#### Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test aa 50km/h (v4.1) Driver
	Driver	Passn	
Head			
- HIC	303	161	41
- Acceleration (g for 3ms)	42.4	30.8	22.5
Neck			
- Shear (kN)	0.34	0.47	
- Tension (kN)	1.19	1.05	
- Extension (Nm)	10	18.4	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	27.29	29.45	24.36
- Viscous Criterion (m/s)	0.1	0.13	0.28
Abdomen			
- Force (kN)			1.2
Pelvis			
- Force (kN)			2.44
Upper Legs Force (kN)			
- Left	0.44	0.23	
- Right	1.49	0.29	
Knee Displacement (kN)			
- Left	0.32	0.43	
- Right	0.1	0.19	
Lower Legs Force (kN)			
- Left	1.34	2.57	
- Right	2.25	1.54	
Index (Upper   Lower)			
- Left	0.31   0.31	0.3   0.22	
- Right	0.48   0.52	0.4   0.32	

#### Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: None fitted - zero points

#### Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable & concentrated loading 2 pt deduction L & R
Lower leg	No deduction
Foot score	Score 4 points
Structure	No deduction

#### Modifiers for side impact test scores

Head	No deduction
Chest	Backplate load 0.5 pt deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	No deduction
Structure	No deduction



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PO Box 1555  
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