

# Crash Tests

## New Car Safety

### Mazda6 (LHD)

2005 on

Driver+side & head airbags

#### Occupant Protection



**Occupant Protection Score 28.20 out of 37**

Variant: 5 dr Hatch

Eng: 2 litre

Kerb weight: 1330 kg

Category: MEDIUM CAR/MPV

Vehicles built: 2005

Test by Euro NCAP

**Important note:** 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.

#### OCCUPANT PROTECTION: 4 Stars

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.



Offset crash test at 64km/h

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver
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)	10.0	18.4	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	27.29	29.45	24.36
Viscous criterion (m/s)	0.10	0.13	0.28
Abdomen - Force (kN)	-	-	1.200
Pelvis - Force (kN)	-	-	2.440
Upper legs Force (kN)	Left 0.44 Right 1.49	0.23 0.29	
Knee displ (mm)	Left 0.32 Right 0.10	0.43 0.19	
Lower legs Force (kN)	Left 1.34 Right 2.25	2.57 1.54	
Index (Upper/Low)	Left 0.31 / 0.31 Right 0.48 / 0.52	0.30 / 0.22 .4 / .32	

#### Bonus points (maximum 5)

Pole Test: 2 pts    Seat belt reminders: None in Australia

#### Modifiers - offset test scores

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

#### Modifiers - side impact test scores

Chest Backplate load	0.5pt deduction
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#### PEDESTRIAN PROTECTION RATING (v4.1)

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



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