

Crash Tests

New Car Safety

Mazda 3

07/2006 on 06/2008 - Frontal+Side+Head

Overall Evaluation



Overall Score

Variant: 5 Dr Hatch

32.49 out of 37

Engine: 1.6 Litre

Category: Small Car

The left-hand-drive European model with side curtains 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 Mazda 3 was introduced in Australia during 2004. This updated assessment applies to the 2006 model.

Dual front airbags and ABS/EBD brakes are standard. Head-protecting side curtains and side airbags are standard on the Maxx, Maxx Sport, MPS and SP23 and optional on the Neo. Electronic stability control is standard on the MPS and SP23 and optional for other variants. Advanced seat belt reminders are fitted to all seats.

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 Mazda 3 hatch scored 12.37 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the passenger. There was a slight risk of serious chest and leg injury for the driver.

The vehicle scored 15.5 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.

If the offset score had been slightly higher (12.5 or more) the vehicle would have earned 5 stars.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.78 pts, upper legs 2 pts, lower legs 3.59 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 37 mm and upwards 5 mm. The steering wheel hub moved forwards 40mm, downwards 11mm and sideways 5 mm. The front ("A") pillar moved 9 mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

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. Glove box and centre console components were a potential source of injury for the passenger's knees.

Side Impact Crash Test

Body region scores out of 4 points each: Head 4 pts, chest 3.5 pts, abdomen 4 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)



Child head impacts	5.68
Adult head impacts	6.85
Upper leg impacts	2.16
Lower leg impacts	Zero
Total (out of 36)	14.69

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	Passn	Driver
Head			
- HIC	326	151	53.15
- Acceleration (g for 3ms)	40.4	30.8	24.7
Neck			
- Shear (kN)	0.12	0.27	
- Tension (kN)	1.11	0.57	
- Extension (Nm)	16.1	12.2	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	30.56	24.41	24.5
- Viscous Criterion (m/s)	0.15	0.25	0.31
Abdomen			
- Force (kN)			0.92
Pelvis			
- Force (kN)			2.3
Upper Legs Force (kN)			
- Left	0.2	2.81	
- Right	0.35	0.66	
Knee Displacement (kN)			
- Left	0	5.31	
- Right	0	5.38	
Lower Legs Force (kN)			
- Left	1.53	2.61	
- Right	2.45	2	
Index (Upper Lower)			
- Left	0.43 0.21	0.36 0.32	
- Right	0.45 0.41	0.47 0.25	

Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: Fitted to all seats - 3 points

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable loading- D, 1 pt deduction L & R; 2 pt deduction L
Lower leg	No deduction
Foot score	Score 4 points
Structure	

Modifiers for side impact test scores

Head	No deduction
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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