

Crash Tests

New Car Safety

Mercedes-Benz E-Class

07/2009 on 01/0001 - Frontal+Side+Head+Knee

Overall Evaluation



Overall Score

Variant: 220 CDI Avantgarde

34.88 out of 37

Engine: 2.2 diesel

Category: Luxury

The diesel 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 tested model of Mercedes-Benz E-Class was introduced in Australia during 2009.

Dual front airbags, side airbags, pelvis airbags, head-protecting side curtains and a driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to all seats. In accordance with the test protocol, the PRE-SAFE system was not activated for the crash tests conducted by Euro NCAP. PRE-SAFE can be expected improve the occupant protection beyond that evaluated by Euro NCAP. Several other advanced safety features are available, including a reversing camera. Pretensioners are fitted to all outboard 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 (lap) seat belt.

Overall Evaluation: 5

5 Stars. The E-Class scored 13.88 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest and leg injury for the driver and front passenger.

The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.78 pts, upper legs 4 pts, lower legs 3.11 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 8 mm and upwards 2 mm. The steering wheel hub moved 75mm forward, 35mm downward and 5 mm sideways. The front ("A") pillar moved 3 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. Knee airbags protected the driver's knees.

Side Impact Crash Test

Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle was eligible for a pole impact test, since it had head-protecting side airbags. The vehicle earned a further two points in this test.

Pedestrian rating (v4.2)



The tested E-Class was equipped with a pop-up bonnet that provided mostly good head protection. This 3-star pedestrian protection rating only applies to E-Class with this feature, which will be standard on Australian models (except the E63 AMG) from early in 2010. The tested E-Class was equipped with a pop-up bonnet that provided mostly good head protection. This 3-star pedestrian protection rating only applies to E-Class with this feature, which will be standard on Australian models (except the E63 AMG) from early in 2010.

Child head impacts 9.02
Adult head impacts 6
Upper leg impacts Zero
Lower leg impacts 6
Total (out of 36) 21.02

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test at 50km/h (v4.2)
	Driver	Passn	Driver
Head			
- HIC	330	422	56
- Acceleration (g for 3ms)	42.9	56.5	26.6
Neck			
- Shear (kN)	0.75	0.32	
- Tension (kN)	0.84	0.56	
- Extension (Nm)	5.6	11.2	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	30.56	23.4	4.94
- Viscous Criterion (m/s)	0.11	0.09	0.01
Abdomen			
- Force (kN)			0.33
Pelvis			
- Force (kN)			1.37
Upper Legs Force (kN)			
- Left	1.53	0.3	
- Right	1.69	0.3	
Knee Displacement (kN)			
- Left	0.4	0	
- Right	0.4	0.2	
Lower Legs Force (kN)			
- Left	2.7	3.34	
- Right	3.33	2.04	
Index (Upper Lower)			
- Left	0.45 0.19	0.55 0.18	
- Right	0.45 0.36	0.5 0.39	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat Belt Reminders: 3

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	No deduction
Structure	4 pts

Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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