

# Crash Tests

## New Car Safety

### Mercedes-Benz A-Class

07/2005 on 12/2009 - Frontal+Side+Head

#### Overall Evaluation



#### Overall Score

35.96 out of 37

Variant: A 150 Classic 5 Dr Hatch

Engine: 1.5 Litre

Category: Small Car

Vehicles tested after 1 January 2008 will require Electronic Stability Control in order to achieve a 5 star rating. This vehicle was tested prior to this date and may or may not meet this new requirement.

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 tested model of Mercedes Benz A-Class was introduced in Australia during 2005.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. ABS/EBD brakes and electronic stability control are also standard. 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: 5

The Mercedes Benz A-Class scored 14.96 out of 16 in the offset crash test. The passenger compartment held its shape very well. There was a slight risk of serious chest and lower leg injury for the driver.

The vehicle scored 16 out of 16 in the side impact crash test. 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 4pts, chest 3.05pts, upper legs 4pts, lower legs 3.91pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 30 mm and downwards 4mm. The steering wheel hub moved forwards 2mm and downwards 3mm. The front ("A") pillar moved 3 mm rearwards. All doors remained closed during the crash. After the crash moderate effort was required to open the driver's door.

The airbags cushioned the head of the driver and passenger contact was stable for each.

#### Side Impact Crash Test

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

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)	16.53
Child head impacts	3.98
Adult head impacts	4
Upper leg impacts	2.55
Lower leg impacts	6

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 at 50km/h (v4.1)
	Driver	Passn	Driver
Head			
- HIC	447	399	79
- Acceleration (g for 3ms)	52.7	50.2	44.3
Neck			
- Shear (kN)	0.55	0.54	
- Tension (kN)	0.86	1.29	
- Extension (Nm)	10	11.4	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	28.65	26.25	19.6
- Viscous Criterion (m/s)	0.16	0.09	0.11
Abdomen			
- Force (kN)			0.61
Pelvis			
- Force (kN)			0.74
Upper Legs Force (kN)			
- Left	0.19	0.18	
- Right	0.19	0.1	
Knee Displacement (kN)			
- Left	0	0	
- Right	0	0	
Lower Legs Force (kN)			
- Left	2.02	1.56	
- Right	1.92	1.37	
Index (Upper   Lower)			
- Left	0.42   0.36	0.39   0.11	
- Right	0.4   0.17	0.35   0.1	

#### 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	No deduction
Lower leg	No deduction
Foot score	Score 4 points
Structure	No deduction

#### Modifiers for side impact test scores

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



Version 1, Published on: 20/12/2007  
Published by  
New Car Assessment Program  
PO Box 1555  
Canberra ACT Australia 2601