Crash Tests

New Car Safety

MERCEDES B-CLASS (LHD)

2006 on Front + side & head airbags

Occupant Protection



Occupant Protection Score 33.57 out of 37

Variant: B180 CDI Engine: 2 litre diesel

Kerb weight: 1440 kg Category: MEDIUM CAR/MPV

Vehicles built: 2006 Test by Euro NCAP

Important note: 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 Mecedes B Class was introduced in Australia during 2006.

Dual front airbags and side airbags with head-protection are standard equipment for the front seats. ABS/EBD brakes and electronic stability control are also standard. Advanced seat belt reminders are fitted to all seats. Active head restraints and a tyre pressure warning system are also fitted.

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: 5 Stars

The Mercedes B-Class scored 12.57 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver. There was a slight risk of serious chest injury for the driver and passenger.

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 4 pts, chest 3.1 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 20 mm and downwards 1mm. The steering wheel hub moved forwards 3mm and upwards 2 mm. The front ("A") pillar moved 1 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 left knee. 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 4 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



Offset crash test at 64km/h

ahead with the pole test and the vehicle earned a further two points.

INJURY MEASUREMENTS

Refer to the information sheet "How the test and done"	e at 64	Offset Crash Test at 64km/h (v4.1)		
	Driver	Passn	Driver	
Head HIC	508	332	63	
Acceleration (g for 3ms	60.2	46.5	36.6	
Neck - Shear (kN)	0.68	0.37	-	
Tension (kN)	0.72	0.69	-	
Extension (Nm)	14.9	9.3	-	
Chest Accln (g for 3ms	-	-	-	
Compression (mm)	28.28	24.16	18.85	
Viscous criterion (m/s)	0.25	0.10	0.08	
Abdomen - Force (kN)	-	-	0.560	
Pelvis - Force (kN)	-	-	0.800	
Upper legs Force Let	t 0.37	0.28		
(kN) RigI	nt 0.58	0.19		
Knee displ (mm) Left	0.00	0.00		
Rigl	nt 0.00	0.00		
Lower legs Force Left	2.62	1.77		
(kN) Rigl	nt 2.37	1.56		
Index (Upper/Low) Lef	t 0.50 /0.51	0.46 /0.16		
Rigl	nt 0.52 /0.17	0.35/0.15		

Bonus points (maximum 5)

Pole Test: 2 pts Seat belt reminders: 3

Modifiers - offset test scores

Head No deduction
Chest No deduction
Upper leg Variable & conc. loading
Lower leg No deduction L
No deduction L
No deduction
Score 4 points

Modifiers - side impact test scores

hest No deduction

PEDESTRIAN PROTECTION RATING (v4.1)

Child head impacts	4.62	Upper leg impacts	0.40
Adult head impacts	1.00	Lower leg impacts	6.00
Total (out of 36)	12.02	**	7



November 2006

PO Box 1555 Canberra ACT Australia 2601 bclass06.doc Issued 20/11/06