Crash Test Results

New Car Safety

MERCEDES VITO (LHD)



Dual front airbags*



Occupant Protection Score 30.66 out of 37

* Safety equipment, as tested, not standard on all variants

Variant: Viano tested	Eng: 2.2 litre
Kerb weight: 2070 kg	Category: Van
Vehicles built: 2008	Tested by Euro NCAP

Important note: The diesel left-hand-drive European Viano small bus 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. The Vito van can be expected to provide comparable front occupant protection to the vehicle tested by Euro NCAP.

Model History and Safety Features

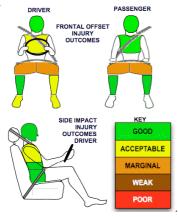
The tested model of Mercedes Vito was introduced in Australia during 2004. This 4-star rating applies to Vitos fitted with bucket front seats and a front passenger airbag. A separate 5-star rating applies to Vitos with side curtains.

A driver airbag, antilock brakes (ABS) with electronic brake distribution (EBD) and electronic stability control (ESC) are standard. A front passenger airbag, side airbags and headprotecting side curtains for the front seats are optional on the van and crew cab and standard on the wagon. Intelligent seat belt reminders are fitted to both front 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. Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. Three point seat belts are fitted to all rear seats. These provide better protection than a two point (lap) seat belt.

OCCUPANT PROTECTION: 4 Stars

The Vito scored 12.79 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 and passenger.

The vehicle scored 15.87 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver.





Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST (v4.2)

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.79 pts, upper legs 2 pts, lower legs 3 pts.

The passenger compartment held its shape well in the offset crash test. The clutch pedal moved rearwards by 59 mm and upwards 39 mm. The steering wheel hub moved 10mm forward, 83mm downward and 4 mm sideways. The front ("A") pillar moved 31 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. A knee bolster behind the fascia was considered to pose a risk of injury to occupants of different sizes and seating positions. The passenger's head was cushioned by the airbag. Passenger head protection might not be as good without the airbag.

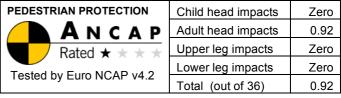
SIDE IMPACT CRASH TEST (v4.2)

Body region scores out of 4 points each: Head 4 pts, chest 3.87 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle tested by Euro NCAP was not eligible for an optional pole impact test, since it did not have headprotecting side airbags.

PEDESTRIAN PROTECTION: 1 Star

The bumper and front edge of the bonnet scored no points. The protection offered to the head of a struck child was poor in every area tested and was poor in most areas for an adult's head.





GOOD ADEQUATE MARGINAL

Pedestrian protection

August 2009

PO Box 4041 Manuka ACT 2603 vito08.DOC Revised 14/8/2008



TECHNICAL DATA - MERCEDES VITO WITH PASSENGER AIRBAG - 2006 on

INJURY MEASUREMENTS

Body region		Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test at 50km/h (v4.2)	
		Driver	Passenger	Driver	
Head HIC		378	476	41	
Acceleration (g for 3ms)		46.3	57.0	28.3	
Neck - Shear (kN)		0.34	0.31	-	
Tension (kN)		1.00	0.72	-	
Extension (Nm)		20.8	16.9	-	
Chest Accln (g for 3ms)		-	-	-	
Compression (mm)		23.47	20.06	7.42	
Viscous criterion (m/s)		0.11	0.12	0.04	
Abdomen - Force (kN)		-	-	0.470	
Pelvis - Force (kN)		-	-	0.560	
Upper legs Force (kN)	Left	2.28	2.64		
	Right	1.51	0.16		
Knee displ (mm)	Left	0.10	0.00		
	Right	3.60	0.10		
Lower legs Force (kN)	Left	2.37	1.15		
	Right	0.77	1.70		
Index (Upper/Low)	Left	0.53 /0.39	0.27 /0.26		
	Right	0.23 /0.20	0.25/0.27		

Bonus points (maximum 5)

Pole Test: Not eligible due to a lack of head-protecting side airbags on vehicle tested by Euro NCAP

Seat belt reminders: 2 (see table below for details)

Modifiers - deductions from offset test scores

Head No deduction Chest No deduction Upper leg Variable & conc. loading 2 pt deduction Left & Right for driver & passenger Lower leg No deduction Foot score Footwell rupture Score 3 points

Modifiers - deductions from side impact test scores

0.13 pt deduction

Safety features

Chest Backplate load

These specifications are subject to change. Please check with manufacturer for the latest specifications.

Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution / Brake Assist	S/S/S
Passenger front airbag	0 √	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	0	3 point centre rear seat belt	S all
Side airbags. front seats - head protection	0	Active head restraints - front seats	Х
Side airbags. rear seats - head protection	х	Intelligent seat belt reminder - driver	S
Driver knee airbag	x	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Rear seat belt status indicator	Х

Key: $\sqrt{}$ = Fitted to vehicle that was crash tested (where not standard)

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant

ESC required by ANCAP for 5 star rating from 2008





