

Crash Test Results

New Car Safety

MERCEDES VIANO (LHD)

2005 on

Dual front airbags



ANCAP Occupant Protection
Rated ★★★★★

Occupant Protection Score 30.66 out of 37

Variant: Trend

Eng: 2.2 litre

Kerb weight: 2070 kg

Category: MPV

Vehicles built: 2008

Tested by Euro NCAP

Important note: The *diesel left-hand-drive* European model *without head-protecting side airbags* 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 Viano was introduced in Australia during 2005.

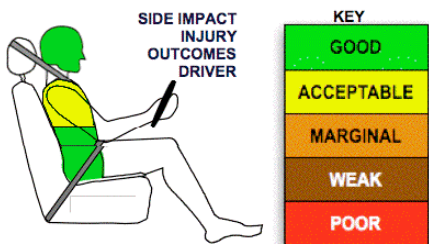
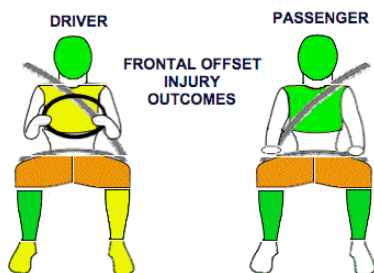
Dual front airbags, side airbags and head-protecting side curtains for the front seats are now standard equipment in Australia. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front 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 Viano 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.


SIDE IMPACT CRASH TEST (v4.2)

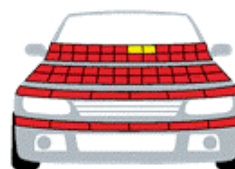
Body region scores out of 4 points each: Head 4 pts, chest 3.87 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle tested by Euro NCAP was not eligible for an optional pole impact test, since it did not have head-protecting side airbags. The Australian model has these as standard and can be expected to provide better protection in a severe side impact.

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.

PEDESTRIAN PROTECTION		
 Rated ★★★★★ Tested by Euro NCAP v4.2	Child head impacts	Zero
	Adult head impacts	0.92
	Upper leg impacts	Zero
	Lower leg impacts	Zero
	Total (out of 36)	0.92



Pedestrian protection

GOOD
ADEQUATE
MARGINAL

January 2009

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Manuka ACT 2603

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ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - MERCEDES VIANO - 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

Chest Backplate load 0.13 pt deduction

Safety features

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	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	S	3 point centre rear seat belt	S all
Side airbags, front seats - head protection	S	Active head restraints - front seats	X
Side airbags, rear seats - head protection	X	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	X

Key:

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

