

Crash Tests

New Car Safety

MERCEDES C-CLASS(LHD)

April 2004 on Front+side+head airbags

Overall Evaluation



Overall score

32.69 out of 37

Variant:SEDAN

Eng:1.8L litre.

Kerb weight: 1460 kg

Category: LUXURY

Vehicles built: 2001/2003

Test by Euro NCAP

Important note: The *left-hand-drive* European model was tested by EuroNCAP. 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 C-Class was introduced in Australia during 2000. Dual front airbags, side airbags and head-protecting side curtains are standard equipment. ABS brakes and electronic stability control are also standard. An advanced seat belt reminder is fitted to Australian models from April 2004. New Zealand models may have had the advanced seat belt reminder before that date.

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. 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 Stars

The Mercedes C-Class scored 13.82 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest injury was marginal for the driver.

The vehicle scored 15.87 out of 16 in the side impact crash test. There was a slight risk of serious abdomen injury for the driver. A further 1 point was scored in the optional pole test.

The advanced seat belt reminder earned the vehicle a further 2 points and this gave a 5 star rating (minimum 32.5 pts).

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2.49pts, upper legs 4pts, lower legs 3.33pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved forwards by 78mm and downwards 27mm. The steering wheel hub moved rearwards 12mm and downwards 15mm. The front ("A") pillar moved 27mm rearwards. The width of the driver's doorway shortened by 27mm. 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. The passenger's head was also cushioned by an airbag.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 4pts, abdomen 3.87pts, 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. During the test there



Offset crash test at 64km/h

was concerned about the deployment of the curtain and the vehicle earned one out of two points.

INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
Head HIC	360	372	49.3
Acceleration (g for 3ms)	46	49.3	24.4
Neck - Shear (kN)	0.35	0.44	-
Tension (kN)	0.03	0.04	-
Extension (Nm)	-	-	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	32.6	30.1	20.47
Viscous criterion (m/s)	0.15	0.17	0.15
Abdomen - Force (kN)	-	-	1.05
Pelvis - Force (kN)	-	-	1.25
Upper legs Force (kN)	Left 0 Right 0	2.22 0.49	
Knee displ (mm)	Left 0.9 Right 0.51	4.1 0.41	
Lower legs Force (kN)	Left 1.44 Right 2.45	2.06 1.86	
Index (Upper/Low)	Left 0.41/0.25 Right 0.55/0.49	0.46/0.35 0.38/0.18	

Bonus points (maximum 5)

Pole Test: 1 pt

Seat belt reminders: 2 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

Pedestrian rating (2002 protocol)



11.5 points out of 36

Child head impacts 3.44pts; adult head impacts 7.28pts; upper leg 0.74pts and lower leg impacts 0.04pts.



March 2004

Published by

New Car Assessment Program

PO Box 1555

Canberra ACT Australia 2601

c_class04.doc issued 23-Mar-04