

# Crash Tests

## New Car Safety

### BMW X5 (LHD)

June 2003 on Front+side+head airbags

Overall Evaluation 

Overall score **32.66 out of 37**

Variant: WAGON Eng: 3 litre V6 litre.  
Kerb weight: 2090 kg Category: 4WD - LARGE  
Vehicles built: 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 BMW X5, with advanced seat belt reminders, was introduced in 2003

Dual front airbags, side airbags and head-protecting inflatable tubes are standard equipment. ABS brakes and electronic stability control are also standard.

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 BMW X5 scored 12.66 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal 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. The advanced seat belt reminder earned the vehicle 2 extra 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 2.66pts, upper legs 2pts, lower legs 4pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 56mm and upwards 24mm. The steering wheel hub moved rearwards 12mm, upwards 24mm and sideways 3mm. The front ("A") pillar moved 22mm 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. Dash components were a potential source of injury for the driver and passenger knees.

#### SIDE IMPACT CRASH TEST

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

This test simulates a fairly small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the X5. Such vehicles can be expected to perform relatively well in this particular side impact test.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags (tubes) and scored four points for the head in the side impact test. The



Offset crash test at 64km/h

manufacturer decided to go ahead with the pole test and the vehicle earned a further 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	314	213	21
Acceleration (g for 3ms)	45.4	39.1	14.7
Neck - Shear (kN)	0.22	0.25	-
Tension (kN)	0.48	0.36	-
Extension (Nm)	12.81	11.54	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	31.4	27.59	8.53
Viscous criterion (m/s)	0.15	0.1	0.02
Abdomen - Force (kN)	-	-	0.28
Pelvis - Force (kN)	-	-	0.41
Upper legs Force Left (kN)	0.24	1.09	
Right (kN)	1.28	0.15	
Knee displ (mm) Left	0.27	5.25	
Right	0.35	0.48	
Lower legs Force Left (kN)	1.09	1.55	
Right (kN)	1.63	1.61	
Index (Upper/Low) Left	0.34/0.22	0.2/0.31	
Right	0.29/0.22	0.37/0.17	

#### Bonus points (maximum 5)

Pole Test: 2pts Seat belt reminders: 2pts

#### Modifiers for offset test scores

Head No deduction  
Chest No deduction  
Upper leg Variable & conc. loading Drv 2 pt deduction L & R  
Passn 1pt deduction L&R  
Lower leg No deduction  
Foot score Score 4 points

#### Pedestrian rating (2002 protocol)

1.69 points out of 36.



Child head impacts 0.72pts; adult head impacts 0.97pts; upper leg nil pts and lower leg impacts nil pts.



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