

Crash Tests

New Car Safety

Volvo XC60

03/2009 on 01/0001 - Frontal+Side+Head

Overall Evaluation



Overall Score

Variant: LHD Momentum

36.53 out of 37

Engine: 2.4 Diesel

Category: Medium SUV

Left Hand Drive

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 Volvo XC60 was introduced in Australia in March 2009. Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to all seats. City Safe - an advanced collision avoidance system - is standard. Several other advanced safety features are available. 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 all 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 (lap) seat belt.

Overall Evaluation: 5

5 Stars. The XC60 scored 15.53 out of 16 in the offset crash test. The passenger compartment held its shape extremely well. The was a slight risk of serious chest and leg injury for the driver.

The vehicle scored 16 out of 16 in the side impact crash test. A further two points were earned in the optional pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.70 pts, upper legs 4 pts, lower legs 3.82 pts.

The passenger compartment held its shape extremely well in the offset crash test. The brake pedal moved rearwards by 9 mm. The throttle pedal moved upwards 9 mm. The steering wheel hub moved 29mm forward, 5mm downward and 7 mm sideways. The front ("A") pillar moved 3 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. There were no knee hazards. 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 it was within reach of a 5 star rating. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

Pedestrian rating (v4.2)



Child head impacts	8
Adult head impacts	3.27
Upper leg impacts	Zero
Lower leg impacts	6
Total (out of 36)	17.27

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test aa 50km/h (v4.2)
	Driver	Passn	Driver
Head			
- HIC	367	258	39
- Acceleration (g for 3ms)	52.4	41.5	21.5
Neck			
- Shear (kN)	0.7	0.78	
- Tension (kN)	0.99	0.36	
- Extension (Nm)	21.7	10	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	24.08	20.39	12.75
- Viscous Criterion (m/s)	0.1	0.08	0.03
Abdomen			
- Force (kN)			0.36
Pelvis			
- Force (kN)			0.64
Upper Legs Force (kN)			
- Left	0.06	2.15	
- Right	0.23	0.1	
Knee Displacement (kN)			
- Left	0	0	
- Right	0	0	
Lower Legs Force (kN)			
- Left	2.1	1.64	
- Right	1.55	1.6	
Index (Upper Lower)			
- Left	0.32 0.27	0.43 0.34	
- Right	0.44 0.23	0.4 0.12	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat Belt Reminders: 3

Modifiers for offset test scores

Head	
Chest	
Upper leg	Variable & Conc Loading
Lower leg	
Foot score	
Structure	

No deduction
No deduction
No deduction
No deduction
4 pts

Modifiers for side impact test scores

Head
Chest
Upper leg
Lower leg
Foot score
Structure

No deduction



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