

# Crash Test Results

## New Car Safety

### VOLVO XC60 (LHD)

2009 on Front+side+head airbags



Offset crash test at 64km/h



**ANCAP** Occupant Protection  
Rated ★★★★★

**Occupant Protection Score** 36.53 out of 37

Variant: Momentum Eng: 2.4 Diesel

Kerb weight: 1850 kg Category: 4WD - Medium

Vehicles built: 2008 Tested by Euro NCAP

**Important note:** 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.

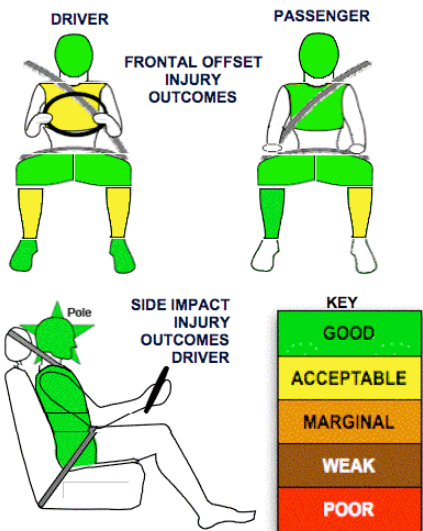
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted all seats. City Safety - an 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.

#### OCCUPANT PROTECTION: 5 Stars

The XC60 scored 15.53 out of 16 in the offset crash test. The passenger compartment held its shape extremely well. There 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 (v4.2)

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.

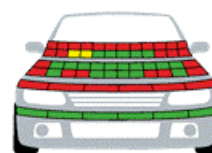
#### SIDE IMPACT CRASH TEST (v4.2)

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 PROTECTION: 2 Stars

PEDESTRIAN PROTECTION		Child head impacts	8
 Rated ★★☆☆☆ Tested by Euro NCAP v4.2	Adult head impacts	3.27	
	Upper leg impacts	Zero	
	Lower leg impacts	6	
	Total (out of 36)	17.27	



Pedestrian protection

GOOD  
ADEQUATE  
MARGINAL

March 2009

PO Box 4041

Manuka ACT 2603

xc60\_09.doc

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**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

# TECHNICAL DATA - VOLVO XC60 - 2009 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
<b>Head HIC</b>	367	258	39
Acceleration (g for 3ms)	52.4	41.5	21.5
<b>Neck - Shear (kN)</b>	0.70	0.78	-
Tension (kN)	0.99	0.36	-
Extension (Nm)	21.7	10.0	-
<b>Chest Accln (g for 3ms)</b>	-	-	-
Compression (mm)	24.08	20.39	12.75
Viscous criterion (m/s)	0.10	0.08	0.03
<b>Abdomen - Force (kN)</b>	-	-	0.360
<b>Pelvis - Force (kN)</b>	-	-	0.640
<b>Upper legs Force (kN)</b>			
Left	0.06	2.15	
Right	0.23	0.10	
<b>Knee displ (mm)</b>			
Left	0.00	0.00	
Right	0.00	0.00	
<b>Lower legs Force (kN)</b>			
Left	2.10	1.64	
Right	1.55	1.60	
<b>Index (Upper/Low)</b>			
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 (see table below for details)

### Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg Variable & conc. loading	No deduction
Lower leg	No deduction
Foot score	Score 4 points

### Modifiers - deductions from side impact test scores

Chest	No deduction
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### 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
Side airbags, front seats - head protection	S	Active head restraints - front seats	S
Side airbags, rear seats - head protection		Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/S	Rear seat belt status indicator	S

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