

# Crash Tests

## New Car Safety

### VOLVO S60 (LHD)

2000 on

Driver+side+head airbags

#### Overall Evaluation



#### Overall score

27.72 out of 37

Variant: SEDAN

Eng: 2.4 litre.

Kerb weight: 1425 kg

Category: LUXURY

Vehicles built: 2001

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. The tested S60 had no frontal airbag for the passenger but dual airbags are standard in Australia. This could affect the overall score.

#### Model History and Safety Features

The tested model of VOLVO S60 was introduced in Australia during 2001.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment in Australia. ABS brakes and electronic stability control are also standard in Australia.

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 : 4 Stars

The VOLVO S60 scored 9.72 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.

#### FRONTAL OFFSET CRASH TEST

*Body region scores out of 4 points each:* Head/neck 4pts, chest 1.98pts, upper legs 2pts, lower legs 1.73pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 121mm and upwards 35mm. The steering wheel hub moved rearwards 49mm and upwards 18mm. The front ("A") pillar moved 25mm rearwards. The width of the driver's doorway shortened by 11mm. 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. Vehicle components were a potential source of injury for the driver's knees. In the tested vehicle the passenger had no airbag and chest protection was marginal.

#### SIDE IMPACT CRASH TEST

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



Offset crash test at 64km/h

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	273.7	223.1	53.1
Acceleration (g for 3ms)	42.8	42.3	24.8
Neck - Shear (kN)	0.49	0.97	-
Tension (kN)	1.39	2.01	-
Extension (Nm)	5.12	5.74	-
Chest Accln (g for 3ms)			-
Compression (mm)	32.73	36.12	17.24
Viscous criterion (m/s)	0.1	0.19	0.09
Abdomen - Force (kN)	-	-	0.52
Pelvis - Force (kN)	-	-	1.77
Upper legs Force	Left	1.98	0.17
(kN) Right		1.19	1.43
Knee displ (mm)	Left	0.56	0.2
Right		0.7	0.62
Lower legs Force	Left	1.75	1.22
(kN) Right		1.42	1.85
Index (Upper/Low)	Left	0.32/0.91	0.29/0.17
Right		0.54/0.24	0.41/0.45

#### Bonus points (maximum 5)

Pole Test: 2pts

Seat belt reminders: Not eligible

#### Modifiers for offset test scores

Head

No deduction

Chest

No deduction

Upper leg Variable & conc. loading

2 pt deduction L & R

Lower leg

No deduction

Foot score

Score 3.16 points

**Pedestrian rating** – tested to previous protocol.



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