

Crash Tests

New Car Safety

VOLVO S40

1997 on

Dual front & side airbags

Overall Evaluation



Overall rating

82%

Variant: Sedan. Engine: 4 Cyl. 1.8 litre.
Kerb weight: 1230 kg Category: LARGE/MEDIUM CAR
Vehicles built: November 1996
Tested by Euro-NCAP

OVERALL EVALUATION : 4 Stars

The Volvo S40 performed well in both crash tests.

The passenger compartment held its shape in the offset crash test. The driver and passenger had airbags and were well protected from serious head injury. There was a moderate risk of serious chest and lower leg injury for the driver.

A side airbag helped to protect the driver in the side impact crash test.

Safety features

Dual front airbags and seat-mounted side airbags are standard equipment.

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. Lap/sash (3 point) seat belts are fitted to all seats, including the centre rear seat.

STRUCTURE : GOOD

Offset crash test

The passenger compartment held its shape well in the offset crash test. The front part of the driver's floor was pushed rearwards 15cm. The brake pedal moved rearwards by 16cm. The width of the driver's doorway shortened by 6cm. All doors remained closed during the crash. After the crash moderate manual effort was required to open the driver's door.

RESTRAINTS

Offset crash test

Airbags cushioned the head of the driver and passenger and movement was well controlled. The driver's knees hit the dash and steering column cover.

Side impact crash test (no front passenger)

Protection of the driver's head was rated as good. The seat-mounted airbag deployed effectively and protection for the chest, abdomen and pelvis was rated adequate.



Offset crash test at 64km/h

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	252	216	107.7
Acceleration (g for 3ms)	39	36	32
Neck - Shear (kN)	0.5	0.9	-
Tension (kN)	1.3	1.5	-
Extension (Nm)	21	24	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	33	31	26
Viscous criterion (m/s)	0.11	0.1	0.25
Abdomen - Force (kN)	-	-	1.2
Pelvis - Force (kN)	-	-	3.3
Upper legs Force			
Left (kN)	3.7	0	
Right (kN)	1.2	1.5	
Knee displ (mm)			
Left	1.3	0	
Right	3.1	3.6	
Lower legs Comp			
Left (kN)	2.3	1.1	
Right (kN)	1.7	0.7	
Index (Upper/Low)			
Left	0.9/0.7	0.28/0.24	
Right	0.9/0.3	0.31/0.12	

November 1999

Published by
New Car Assessment Program
PO Box 1555
Canberra ACT Australia 2601
www.nrma.com.au
s40_97.doc 27-Mar-01

