

Volvo S40



RATING	SCORE	DETAILS
 ADULT OCCUPANT ★★☆☆☆	26	Front: 12 Side: 14
 PEDESTRIAN ★☆☆☆☆	8	Pre 2002 rating

Adult occupant protection



Frontal impact driver



Frontal impact passenger



Side impact driver

- GOOD
- ADEQUATE
- MARGINAL
- WEAK
- POOR

Child restraints

18 month old Child	No information available
3 year old Child	No information available

Pedestrian protection

No image car front available

Safety equipment

Front seatbelt pretensioners	<input checked="" type="checkbox"/>
Front seatbelt load limiters	<input type="checkbox"/>
Driver frontal airbag	<input checked="" type="checkbox"/>
Front passenger frontal airbag	<input type="checkbox"/>
Side body airbags	<input checked="" type="checkbox"/>
Side head airbags	<input type="checkbox"/>
Driver knee airbag	<input type="checkbox"/>

Car details

Hand of drive	RHD
Tested model	Volvo S40 1.8
Body type	4 door saloon
Year of publication	1997
Kerb weight	1231

Comments

The S40 was awarded four stars for protection in frontal and side impacts, the only one of 13 family cars tested to achieve this result. The S40 performed well in the frontal-impact test and no major failings were detected. However, a reduced level of footwell intrusion would be beneficial. The car tested was fitted with a driver airbag and side-impact protection airbags mounted in the front seats all of which are standard equipment throughout Europe. The side airbags move with the seat and should be effective in any seating position.

Front impact

The driver's screen pillar was displaced rearwards by only 48mm (1.9in) and the passenger compartment remained stable. The driver's door required moderate force to open it by hand and the passenger's door operated normally. The steering wheel was pushed rearwards by 59mm (2.3in) and downwards by 15mm (0.6in). There was moderate footwell intrusion, with the brake pedal being pushed rearwards by 164mm (6.5in). Protection of the head and neck was good, and head contact on the airbag was stable. Protection for the chest was marginal. The driver's left knee struck the column cladding and then the facia panel, but protection for the knee, thigh and pelvis remained good. The right knee also hit the facia, but protection of the knee, thigh and pelvis was still considered good, though there was some risk of injury to both lower legs, and footwell intrusion resulted in a 'marginal' rating for feet and ankle protection. Protection for the head, neck, and both legs was good, though forces transmitted via the seat belt to the chest presented some risk of injury. The results for the passenger were not modified on the basis of structural damage to the car.

Side impact

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

Child occupant

The rear-facing seats in the Volvo required supplementary straps. Volvo S40's seat for smaller children uses extra straps to fix it more securely to car structure. There were slight mismatches between child and adult seats, though not thought sufficient to jeopardise safety. The rear-facing seat used in the Volvo required a support leg which extended from the child seat's backrest to the car floor. There was a conflict between how far forward the seat would need to be to provide adequate space for the child's legs and the ability to move the front seat as far rearwards as necessary for adults. The rear-facing seat for 18-month-olds was good in frontal crashes, but in the side-impact test it placed occupants close to the area of maximum car-body intrusion. The dummy ran a significant risk of chest injury. With the forward-facing restraints, any side-impact intrusion into the cabin where the dummy sat was much less of a threat. Although the car tested had no passenger airbag, the child seats might be transferred into a car that had them.

Pedestrian

Child head impact Three of the six test locations met proposed legislation: over the air intake housing, above a bonnet strengthener and over the oil filler cap. One point performed better than average, two were worse than average – over the bonnet hinge mount and at the join between bonnet and wing. Upper leg impact None of the three tests met proposed legislation. All the tests on the bonnet leading edge were worse than average. Adult head impact None of the tests met proposed legislation. One point was better than average: on one of the washer nozzles. Five points were worse than average, the worst over a bonnet hinge. Leg impact None of the three tests met the requirements. One test on the bumper was better than average, two were worse.