

Crash Tests

New Car Safety

Subaru Liberty

08/2009 to 12/2014 - Front+side+head+knee

Overall Evaluation



Overall Score

Variant: 2.5i

34.8 out of 37

Engine: 2.5 manual

Category: Medium Car

Model History and Safety Features

The rated model of Subaru Liberty was introduced in Australia in 2009. This rating is based on crash tests of a Subaru Outback. ANCAP was provided with evidence that the Liberty gives comparable occupant protection.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted to all seats. A rear view camera is 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 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 (lap) seat belt.

Overall Evaluation: 5

5 Stars. The Subaru Liberty scored 13.80 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver.

The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the optional pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.44 pts, upper legs 4 pts, lower legs 2.36 pts.

The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 70 mm. The clutch pedal moved upwards 50 mm. The steering wheel hub moved 38mm forward, 1mm downward and 16 mm sideways. The front ("A") pillar moved 5 mm rearwards. All doors remained closed during the crash. After the crash the driver door opened with normal effort once the rear door had been opened.

The airbag cushioned the head of the driver and contact was stable. A knee airbag protected the driver's knees. 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. The manufacturer decided to go ahead with this test and the vehicle earned a further two points.

Pedestrian rating (v4.1)



There is scope to improve the leading edge and side edges of the bonnet.

Child head impacts	9
Adult head impacts	7.09
Upper leg impacts	Zero
Lower leg impacts	6
Total (out of 36)	22.89

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test aa 50km/h (v4.1) Driver
	Driver	Passn	
Head			
- HIC	316	264	10
- Acceleration (g for 3ms)	45.2	40.6	12.8
Neck			
- Shear (kN)	0.46	0.64	
- Tension (kN)	1.49	0.95	
- Extension (Nm)	21.7	17.7	
Chest			
- Acceleration (g for 3ms)	41.9	41.3	
- Compression (mm)	25.9	20.7	8.2
- Viscous Criterion (m/s)	0.07	0.06	0.04
Abdomen			
- Force (kN)			0.28
Pelvis			
- Force (kN)			0.57
Upper Legs Force (kN)			
- Left	1.5	0.18	
- Right	0.95	0.14	
Knee Displacement (kN)			
- Left	2.01	0.55	
- Right	1.38	0.46	
Lower Legs Force (kN)			
- Left	3.11	1.33	
- Right	2.79	2.13	
Index (Upper Lower)			
- Left	0.46 0.77	0.33 0.19	
- Right	0.36 0.39	0.48 0.39	

Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: 3

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable & Conc. loading
Lower leg	No deduction
Foot score	No deduction
Structure	4 points
	Note: Steering column & pedal movements are measured relative to the driver's seat

Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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