

Crash Test Results

New Car Safety

SUBARU LIBERTY

Aug 2009 on Front+side+head+knee airbags



ANCAP Occupant Protection
Rated ★★★★★

Occupant Protection Score 34.80 out of 37

Variant: 2.5i

Eng: 2.5 manual

Kerb weight: 1500 kg

Category: Car - Medium

Vehicles built: May 2009 (Outback)

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.

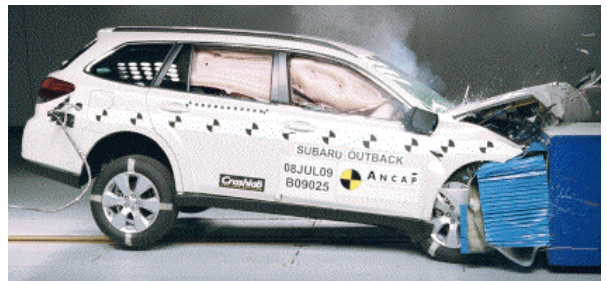
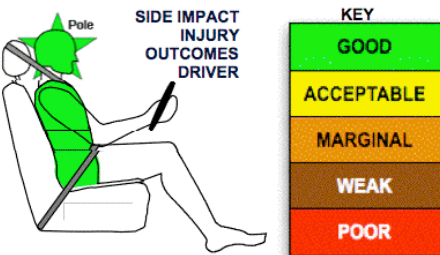
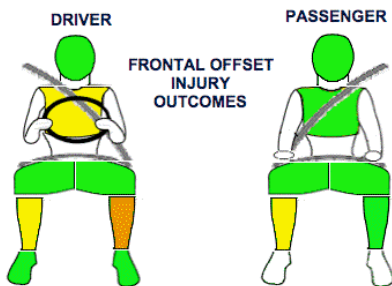
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted to all seats. A rear view camera is available.

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.

OCCUPANT PROTECTION: 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.



Offset crash test at 64km/h (Outback)

FRONTAL OFFSET CRASH TEST (v4.1)

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 (v4.1)

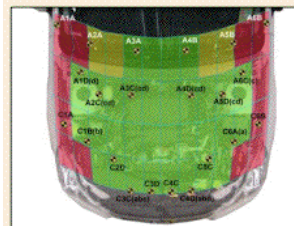
Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.

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 PROTECTION: 3 Stars

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

PEDESTRIAN PROTECTION		
 v4.1	Child head impacts	9
	Adult head impacts	7.09
	Upper leg impacts	Zero
	Lower leg impacts	6
	Total (out of 36)	22.89



Child and adult head impact



Adult leg impact (upper and full legforms)

pass marginal fail

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PO Box 4041

Manuka ACT 2603

liberty09.doc

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ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - SUBARU LIBERTY - 2009 on

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passenger	Driver
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 Accln (g for 3ms)	41.900	41.300	-
Compression (mm)	25.90	20.70	8.20
Viscous criterion (m/s)	0.07	0.06	0.04
Abdomen - Force (kN)	-	-	0.280
Pelvis - Force (kN)	-	-	0.570
Upper legs Force (kN)			
Left	1.50	0.18	
Right	0.95	0.14	
Knee displ (mm)			
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/Low)			
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 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

Note: Steering column and pedal movements are measured relative to the driver's seat.

Modifiers - deductions from side impact test scores

Chest No deduction

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	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	S	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/rear outboard)	S/X	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