

Crash Tests

New Car Safety

SUBARU LIBERTY

1999 on

Dual airbags

Overall Evaluation



Overall rating

86%

Variant: GX Sedan. Engine: 4 Cyl. 2 litre.
Kerb weight: 1410 kg Category: LARGE/MEDIUM CAR
Vehicles built: July 1999

OVERALL EVALUATION : 4 Stars

The Subaru Liberty performed well in both crash tests. The passenger compartment held its shape very well in the offset crash test. The driver and passenger had airbags and were well protected from serious head injury. Protection from serious lower leg injury was marginal for the driver.

The vehicle also performed well in the side impact crash except that protection from serious chest injury was marginal.

Safety features

Dual 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.

Hazard warning lights activated during the crash.

STRUCTURE : GOOD

Offset crash test

The passenger compartment held its shape very well in the offset crash test. The front part of the driver's floor was pushed rearwards 7cm and was only slightly deformed. The brake pedal moved rearwards by 10cm. The dash moved 3cm towards the driver. The width of the driver's doorway shortened by 3cm. All doors remained closed during the crash. After the crash extra effort was required to open the driver's door. The other doors opened easily.

Side impact crash test

The passenger compartment held its shape well in the side impact crash test.

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. The passenger's knees hit the glove box.

Side impact crash test (no front passenger)



Offset crash test at 64km/h

The driver's head rocked outside the side windows, which had shattered. Rebound was well controlled.

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	433	284	38
Acceleration (g for 3ms)	48.7	39.7	31.4
Neck - Shear (kN)	-	-	-
Tension (kN)	1.7	1.3	-
Extension (Nm)	-	-	-
Chest Accln (g for 3ms)	38.9	35.4	-
Compression (mm)	31.8	32.5	29.7
Viscous criterion (m/s)	0.1	0.2	0.42
Abdomen - Force (kN)	-	-	0.9
Pelvis - Force (kN)	-	-	2.1
Upper legs Force			
Left (kN)	3.4	0.5	
Right (kN)	1.4	0.5	
Knee displ (mm)			
Left	0.4	0	
Right	0.4	2.3	
Lower legs Comp			
Left (kN)	2.6	1.6	
Right (kN)	1.4	1.6	
Index (Upper/Low)			
Left	0.52/0.72	0.35/0.33	
Right	0.41/0.45	0.26/0.26	
Injury Risk#	8.2%	6%	

#"Injury risk" is the probability of receiving a life-threatening injury. It is based on dummy head and chest measurements in the offset test.



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