

# Crash Tests

## New Car Safety

### SUBARU LIBERTY

2004 on

Dual front airbags



Offset crash test at 64km/h

#### Overall Evaluation



#### Overall score

32.57 out of 37

Variant: Wagon\*

Eng: 2.5 litre.

Kerb weight: 1439 kg Category: LARGE/MEDIUM CAR

Vehicles built: 2/04 and 1/04 Tested in Japan

\* Note: ANCAP was provided with evidence that the results also apply to the Liberty sedan

#### Model History and Safety Features

The Subaru Liberty was released in 2003. These test results apply to models built from 2004 without side curtains.

Dual front airbags are standard equipment. ABS brakes are also standard. Side airbags with head protecting curtains are available as part of a safety pack (see separate crash test results).

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 seat belt. Advanced seat belt reminders are fitted to all seating positions.

#### OVERALL EVALUATION : 5 Stars

The Subaru Liberty scored 14.52 out of 16 in the offset crash test. The passenger compartment held its shape very well in the offset crash test. There was a slight risk of chest and lower leg injury for the driver and passenger.

The vehicle scored 15.05 out of 16 in the side impact crash test. There was a high risk of serious chest and abdomen injury for the driver.

Advanced seat belt reminders earned the vehicle 3 bonus points and a five star rating.

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 3.21pts, upper legs 4pts, lower legs 3.31pts.

The passenger compartment held its shape very well in the offset crash test. The brake pedal moved rearwards by 25mm and upwards 12mm. The steering wheel hub moved forwards 10mm and upwards 11mm. The front ("A") pillar moved 7mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. The passenger's head was also cushioned by an airbag.

#### SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 3.26pts, abdomen 3.79pts, pelvis 4pts.

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn eligible vehicles an extra two points.

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.0)		Side Impact Crash Test at 50km/h (v4.0)
	Driver	Passn	Driver
Head HIC	316	278	41
Acceleration (g for 3ms)	43.1	40.2	20.3
Neck - Shear (kN)	0.61	1.07	-
Tension (kN)	1.09	1.23	-
Extension (Nm)	30.4	15.4	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	27.51	25.86	11.77
Viscous criterion (m/s)	0.19	0.15	0.08
Abdomen - Force (kN)	-	-	1.08
Pelvis - Force (kN)	-	-	1.76
Upper legs Force Left (kN)	0.61	0.35	
Right (kN)	0.24	0.29	
Knee displ (mm) Left	0.4	0.5	
Right	0.5	1.3	
Lower legs Force Left (kN)	1.55	1.95	
Right (kN)	1.52	2.48	
Index (Upper/Low) Left	0.27/0.37	0.37/0.24	
Right	0.48/0.25	0.48/0.55	

#### Bonus points (maximum 5)

Pole Test: Not eligible

Seat belt reminders: 3 pts

#### Modifiers for 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

#### Modifiers for side impact score

Chest Backplate load

0.74pt deduction

#### Pedestrian rating (v4.0)



18.65 points out of 36

Child head impacts 5.85pts; adult head impacts 5pts; upper leg 6pts and lower leg impacts 1.8pts.



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