

# Crash Test Results

## New Car Safety

### SUBARU FORESTER

Jul 04 on

Front+side+head airbags



**ANCAP** Occupant Protection  
Rated ★★★★★

**Occupant Protection Score 32.78 out of 37**

Variant: XS-LP

Eng: 2.5 litre

Kerb weight: 1420 kg

Category: 4WD - Compact

Vehicles built: 7/02 and 8/02

Tested in Japan

#### Model History and Safety Features

This rating applies to Subaru Foresters built from July 2004, when side airbags with head-protection became standard on all variants. A separate rating is available for earlier versions.

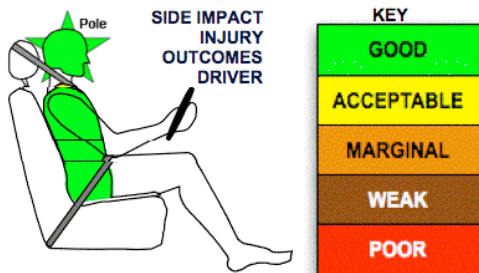
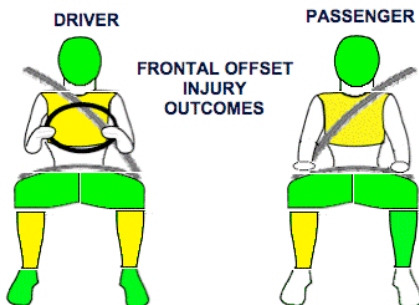
Dual front airbags, side airbags and head-protecting side curtains are standard equipment from July 2004. Antilock brakes (ABS), electronic brake distribution (EBD) are also standard. Electronic stability control is optional on the Luxury XT auto variant. An intelligent seat belt reminder is fitted to the driver seat.

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. Pre-tensioners 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 Forester scored 13.78 out of 16 in the offset crash test. The passenger compartment held its shape very well. There was a slight risk of serious chest and leg injury for the driver and passenger. The vehicle scored 16 out of 16 in the side impact crash test and 2 points out of 2 in the optional pole test.

This was the first vehicle tested by ANCAP to earn 5 stars.



Action shot from pole crash test

#### FRONTAL OFFSET CRASH TEST (v4)

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.67 pts, upper legs 4 pts, lower legs 3.11 pts.

The passenger compartment held its shape very well in the offset crash test. The front part of the driver's floor was pushed rearwards 83mm. The brake pedal mounts released during the crash to reduce the risk of leg injury. The dash moved 11mm towards the driver. The steering wheel hub moved rearwards 2mm, upwards -28mm and sideways 20mm. The front ("A") pillar moved 10mm rearwards. The roof had almost no deformation. The width of the driver's doorway shortened by 11mm. All doors remained closed during the crash. After the crash the driver's door could be opened with normal effort. The airbag cushioned the head of the driver and contact was stable. The driver's knees hit the steering column and dash. The passenger's head was cushioned by the airbag.


#### SIDE IMPACT CRASH TEST (v3)

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

ANCAP tested a Forester without side head airbags and it scored a full 16 points. Based on test evidence received by ANCAP the XS-LP variant with side-head airbags would also score 16 points in the side impact test.

The XS-LP variant was eligible for a Pole Impact Test since it has head-protecting side airbags. This test can earn eligible vehicles an extra two points. Subaru decided to go ahead with the pole test and the vehicle earned a further two points.

#### PEDESTRIAN PROTECTION RATING (v4.1)

PEDESTRIAN PROTECTION	Child head impacts	4
 <b>ANCAP</b> Rated ★★★★★	Adult head impacts	4.45
	Upper leg impacts	Zero
	Lower leg impacts	Zero
	Total (out of 36)	8.45

[no picture of pedestrian rating available]

Sept 2007

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forester07.doc

Updated 20/08/2005



**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

# TECHNICAL DATA - SUBARU FORESTER WITH SIDE-HEAD AIRBAG

July 04 on

## INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4)		Side Impact Crash Test at 50km/h (v3)
	Driver	Passenger	Driver
<b>Head HIC</b>	398		214
Acceleration (g for 3ms)	49.8	44.7	60.8
<b>Neck - Shear (kN)</b>	0.42	0.48	-
Tension (kN)	2.17	1.11	-
Extension (Nm)	24.4	19.4	-
<b>Chest Accln (g for 3ms)</b>	39.200	34.400	-
Compression (mm)	31.30	27.30	14.60
Viscous criterion (m/s)	0.19	0.12	0.08
<b>Abdomen - Force (kN)</b>	-	-	0.392
<b>Pelvis - Force (kN)</b>	-	-	2.030
<b>Upper legs Force</b>			
Left (kN)	1.01	0.70	
Right (kN)	0.60	1.67	
<b>Knee displ (mm)</b>			
Left	2.14	0.25	
Right	0.35	0.09	
<b>Lower legs Force</b>			
Left (kN)	2.15	1.60	
Right (kN)	2.44	1.96	
<b>Index (Upper/Low)</b>			
Left	0.24 /0.34	0.38 /0.20	
Right	0.52 /0.60	0.47/0.39	

### Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 1 (see table below for details)

### Modifiers - deductions from offset test scores

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Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	Score 4 points

### Modifiers - deductions from side impact test scores

Chest	No deduction
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### 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	S/S
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	V
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	X
Side airbags, rear seats - head protection	X	Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	X
Front seat belt pretensioners	S	Rear seat belt status indicator	X

\* Standard on all variants from July 2004.

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

