# Crash Tests



# **Overall Evaluation**

**Overall score** Variant: 2.5X Auto Kerb weight: 1420 kg Vehicles built: 7/02 and 8/02

30.78 out of 37 Eng: 4cyl 2.5 litre. Category: Compact 4WD

#### **Model History and Safety Features**

The tested model of SUBARU FORESTER was introduced in 2002. Vehicles built from February 2003 have improved knee protection and a seat belt reminder for the driver and this revised assessment applies to those vehicles.

Dual front airbags are standard equipment. Head-protecting side airbags are not available on the X and XS variants but are available as part of a Luxury Pack on the XS-LP variant (see separate sheet). ABS brakes are standard on all variants.

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. These seat belts also have load limiters. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point seat belt.

### **OVERALL EVALUATION : 4 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.

### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2.67pts, upper legs 4pts, lower legs 3.111pts.

The passenger compartment held it 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. The passenger's knees hit the glove box.

### SIDE IMPACT CRASH TEST

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

Protection from serious injury was good.

The tested variant 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.



Offset crash test at 64km/h

## **INJURY MEASUREMENTS**

Refer to the information sheet "How the test ar done"		Offset Crash Test at 64km/h	
	Driver	Passn	Driver
Head HIC	398	307	214
Acceleration (g for 3ms)	49.8	44.7	60.8
Neck - Shear (kN)	0.42		-
Tension (kN)	2.17	1.11	-
Extension (Nm)	24.4	19.35	-
Chest Accln (g for 3ms)	39.2		-
Compression (mm)	31.3	27.3	14.6
Viscous criterion (m/s)	0.19	0.12	0.08
Abdomen - Force (kN)	-	-	0.392
Pelvis - Force (kN)	-	-	2.03
Upper legs Force Left	1.01	0.7	
(kN) Righ	t 0.6	1.67	
Knee displ (mm) Left	2.14	0.25	
Righ	t 0.35	0.09	
Lower legs Force Left	2.15	1.6	
(kN) Righ	t 2.44	1.96	
Index (Upper/Low) Left	0.24/0.34	0.38/0.2	
Righ	t 0.52/0.6	0.47/0.39	

Bonus points (maximum of 5, giving possible score of 37) Pole Test: Not eligible Seat belt reminders: 1 point

#### Modifiers for offset test scores

Head Chest	No penalty No penalty	
Upper leg	No penalty	
Lower leg	No penalty	
Foot score	Score 4 po	ints
Pedestrian rating (2002 protocol)	$\checkmark$	
9.45 moints out of 26 (220/)		

8.45 points out of 36 (23%)

Child head impacts 4pts; adult head impacts 4.45pts; upper leg zero pts and lower leg impacts zero pts.



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