

Crash Tests

New Car Safety

SUBARU FORESTER

2002 on

Dual front airbags

Overall Evaluation



Overall score

28.78 out of 34

Variant: 2.5X Auto

Eng: 4cyl 2.5 litre.

Kerb weight: 1420 kg

Category: Compact 4WD

Vehicles built: 7/02 and 8/02

Model History and Safety Features

The tested model of SUBARU FORESTER was introduced in July 2002.

Dual front airbags are standard equipment. Side airbags with head protection are available as part of a Luxury Pack on the XS variant. 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 12.78 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 3pts, lower legs 3.11pts.

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 ignition switch barrel was found to be a potential source of knee injury. 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.

Impact forces were spread fairly evenly between the doors, sill and centre pillar. The driver side window did not break. Protection from serious injury was good.



Offset crash test at 64km/h

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, giving a maximum possible overall score of 34 points.

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	398	307	214
Acceleration (g for 3ms)	49.8	44.7	60.8
Neck - Shear (kN)	0.42	0.48	-
Tension (kN)	2.17	1.11	-
Extension (Nm)	24.4	19.35	-
Chest Accln (g for 3ms)	39.2	34.4	-
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 (kN)			
Left	1.01	0.7	
Right	0.6	1.67	
Knee displ (mm)			
Left	2.14	0.25	
Right	0.35	0.09	
Lower legs Force (kN)			
Left	2.15	1.6	
Right	2.44	1.96	
Index (Upper/Low)			
Left	0.24/0.34	0.38/0.2	
Right	0.52/0.6	0.47/0.39	

Bonus points

Pole Test: Not eligible

Seat belt reminders: Not eligible

Modifiers for offset test scores

Head

No penalty

Chest

No penalty

Upper leg

Conc. loading

1pt penalty L&R

Lower leg

No penalty

Foot score

Score 4 points

Pedestrian rating (2002 protocol)



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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