

Crash Tests

New Car Safety

NISSAN X-TRAIL

2001 on

Dual front airbags

Overall Evaluation



Overall score

25.1 out of 34

Variant: ST

Eng: 4 cyl 2.5 litre.

Kerb weight: 1440kg

Category: Compact 4WD

Vehicles built: 2002

Important note: The *left hand drive* European model was used for the offset test conducted by EuroNCAP. Australian specifications may vary and therefore models sold in Australia might provide different levels of protection in the offset test to those described on this page.

Model History and Safety Features

The tested model of NISSAN X-TRAIL was introduced in late 2001.

Dual front airbags are standard equipment, as are ABS brakes. Side airbags are standard in Europe but are not available in Australia. 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.

OVERALL EVALUATION : 4 Stars

The NISSAN X-TRAIL scored 9.097 out of 16 in the offset crash test. The passenger compartment held its shape well except for excessive pedal movement. Protection from serious leg injury was poor for the driver.

The Australian vehicle (without side airbags) 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 2.74pts, upper legs zero pts, lower legs 2.36pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 117mm and upwards 40mm. The steering wheel hub moved rearwards 46mm, upwards 54mm and sideways 13mm. The front ("A") pillar moved 32mm rearwards. The width of the driver's doorway shortened by 29mm. All doors remained closed during the crash. After the crash a high manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. Steering column components were potential sources of injury to the driver's knees. The passenger's head was cushioned by the airbag. The dash had a potential source of injury for the passenger's inboard knee.

SIDE IMPACT CRASH TEST

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

This test simulates a fairly small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the X-trail. Such vehicles can be expected to perform relatively well in this particular side impact test.



Offset crash test at 64km/h

The Australian 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, 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	377.4	267.9	53
Acceleration (g for 3ms)	50.19	40.4	24.2
Neck - Shear (kN)	-	-	-
Tension (kN)	-	-	-
Extension (Nm)	16.9	27.52	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	30.81	25.16	3.5
Viscous criterion (m/s)	0.18	0.11	0
Abdomen - Force (kN)	-	-	0.976
Pelvis - Force (kN)	-	-	0.91
Upper legs Force			
Left (kN)	7.1	3.17	
Right (kN)	1.35	0.7	
Knee displ (mm)			
Left	1.29	4.55	
Right	0.24	2.01	
Lower legs Force			
Left (kN)	0.68	2.27	
Right (kN)	2.03	2.67	
Index (Upper/Low)			
Left	0.23/0.34	0.33/0.34	
Right	0.77/0.56	0.27/0.29	

Bonus points

Pole Test: Not eligible

Seat belt reminders: Not eligible

Modifiers for offset test scores

Head

No penalty

Chest

No penalty

Upper leg

Variable & Conc. loading

2pt penalty L&R

Lower leg

No penalty

Foot score

Brake pedal rear move

Score 3.32 pts

Pedestrian rating (2002 protocol)



10.37 points out of 36 (29%)

Child head impacts zero pts; adult head impacts 8.37pts; upper leg zero pts and lower leg impacts 2pts.

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