

Crash Tests

New Car Safety

DAEWOO NUBIRA

1999 on

Driver's airbag



Offset crash test at 64km/h

Overall Evaluation*



Overall score*

13.10 out of 34

* High risk of life threatening chest injury in side impact test.

Variant: Sedan.

Engine: 4 Cyl. 2 litre.

Kerb weight: 1280 kg

Category: SMALL CAR

Vehicles built: Nov-99 and Jan-00

Safety features

A driver's airbag is standard equipment. A passenger airbag is available with the optional "sports pack".

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. Lap/sash seat belts are fitted to all seats, including the centre rear seat. A lap/sash seat belt is safer than a lap only belt. The dash has energy absorbing foam in areas where the driver's knees can be expected to impact.

Hazard lights activated during the offset crash test.

OVERALL EVALUATION : 2 Stars*

The DAEWOO NUBIRA did not perform well in the offset crash test (score 4.73 out of 16). The passenger compartment was substantially deformed. The driver's contact with the airbag was unstable. Protection from serious leg injury was poor for the driver. The vehicle performed better in the side impact crash (score 8.37 out of 16) but there was a high risk of life threatening chest injury for the driver.

FRONTAL OFFSET CRASH TEST

The passenger compartment was substantially deformed in the offset crash test. The brake pedal moved rearwards by 25cm. The dash moved 18cm towards the driver. The roof buckled upwards above the driver and the width of the driver's doorway shortened by 20cm. All doors remained closed during the crash. After the crash all doors could be opened without tools. The exhaust pipe pushed against and dented the fuel tank. The tank did not rupture but this could be a fire hazard.

The steering column moved left and this affected airbag positioning. The airbag cushioned the head of the driver but the head then started to twist and rolled off the side of the airbag. The head then hit the front pillar. During rebound the head hit the top of the doorframe. The impact of the driver's knees against the dash was cushioned by foam but the forces were still high enough to give a moderate risk of injury. There was also a risk of knee injury from a sharp metal bracket near the centre console.

SIDE IMPACT CRASH TEST

The centre pillar and the side doors were pushed inwards substantially. The floor near the centre pillar was deeply folded.

The passenger's head hit the dash with a moderate impact. The passenger's knees hit the glove box.

The driver's head hit the centre pillar with a moderate impact but injury risk was low.

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	210	389	225
Acceleration (g for 3ms)	42.5	74.3	62.7
Neck - Shear (kN)	-	-	-
Tension (kN)	1.88	1.68	-
Extension (Nm)	18.14	12.42	-
Chest Accln (g for 3ms)	45.7	33.4	-
Compression (mm)	23.97	34.33	47.03
Viscous criterion (m/s)	0.1	0.1	1.45
Abdomen - Force (kN)	-	-	2.36
Pelvis - Force (kN)	-	-	2.57
Upper legs Force	6.39	0.58	
Left (kN) Right	7.74	3.35	
Knee displ (mm) Left	1.45	0.62	
Right	6.54	1.69	
Lower legs Force	5.28	1.34	
(kN) Right	2.8	2.16	
Index (Upper/Low) Left	0.52/0.71	0.35/0.21	
Right	1.06/1.45	0.49/0.25	

Offset test modifiers:

Head	Unstable airbag contact	1 pt penalty
	Steering col. movement	1 pt penalty
Chest	A-pillar movement	2 pt penalty
Upper leg	Concentrated loading, L	1 pt penalty
Foot score	Brake pedal movement	Zero score

PEDESTRIAN RATING: ★★

2 Stars (34% of 36)



August 2000

Published by
New Car Assessment Program
PO Box 1555
Canberra ACT Australia 2601
www.nrma.com.au
nubira00.doc revised 26 Nov 2000