

# Crash Tests

## New Car Safety

### DAEWOO LANOS 3-DOOR

1998 on No airbag

#### Overall Evaluation\*



**Overall score\*** **7.29 out of 34**

\* High risk of life threatening abdomen injury.

Variant: 3 Door Engine: 4 Cyl. 1.5 litre.  
Kerb weight: 1060 kg Category: SMALL CAR  
Vehicles built: Jan-98 and Jul-99

#### Safety features

Dual airbags (driver and passenger) are available as part of an optional safety package for about \$2,500.

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. The front seat belts have pretensioners.

#### OVERALL EVALUATION : 1 Star\*

The DAEWOO LANOS 3-DOOR performed poorly in the offset crash test (score 0.31 out of 16). The passenger compartment was substantially deformed. Protection from serious head and leg injury was poor for the driver.

The vehicle performed better in the side impact crash (score 6.98 of 16) but there was a high risk of life threatening abdomen injury for the driver.

#### FRONTAL OFFSET CRASH TEST

The passenger compartment was substantially deformed in the offset crash test. The front part of the driver's floor was pushed rearwards 20cm. The brake pedal moved rearwards by 21cm. The dash moved 25cm towards the driver. The roof buckled upwards above the driver and the width of the driver's doorway shortened by 17cm. The driver's door was separating. All doors remained closed during the crash. After the crash the driver's door could not be opened, even with available tools.

The steering column moved to the left. The driver's head hit the steering rim then the top of the dash with a hard impact and protection from serious head injury was marginal. An additional 'faceform' test was conducted and revealed poor protection from serious head injury for the driver. The passenger's head glanced the dash. The driver's left knee hit the dash with a moderately severe impact. Protection for the lower legs was poor.

#### SIDE IMPACT CRASH TEST

The centre pillar and the side doors were pushed inwards substantially. The driver's seat was pushed sideways but the anchorages held. The door panels separated, exposing a sharp edge along the window sill.

The back of the driver's head glanced the centre pillar. The head continued moving outboard and down until the side of the head hit the exposed edge of the door panel. With a human occupant there is a possibility that the impact with a sharp metal edge would have caused a severe penetrating injury to the skull (the dummy is not designed to assess penetrating injuries).



Offset crash test at 64km/h

The 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
<b>Head HIC</b>	898	249	177
Acceleration (g for 3ms)	69.6	44.0	53.6
<b>Neck - Shear (kN)</b>	-	-	-
Tension (kN)	-	-	-
Extension (Nm)	-	-	-
<b>Chest Accln (g for 3ms)</b>	52.1	40.5	-
Compression (mm)	38.20	28.20	31.10
Viscous criterion (m/s)	-	-	0.30
<b>Abdomen - Force (kN)</b>	-	-	3.23
<b>Pelvis - Force (kN)</b>	-	-	5.40
<b>Upper legs Force</b>			
Left (kN)	8.50	1.70	
Right (kN)	4.50	2.10	
<b>Knee displ (mm)</b>			
Left	-	-	
Right	-	-	
<b>Lower legs Force</b>			
Left (kN)	-	-	
Right (kN)	-	-	
<b>Index</b>			
Left	0.54		
Right	2.34		

#### Offset test modifiers:

Head	Steering col. movement	1 pt penalty
Chest	A-pillar movement	1.38 pt penalty
Upper leg penalty L & R	Variable & conc. loading	2 pt
Foot score	Brake pedal movement	Zero score

#### PEDESTRIAN RATING: ★★

13.77 pts (38% of 36)



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