

Crash Tests

New Car Safety

Daewoo Leganza

1998-on

Driver's Airbag

Overall Evaluation*



Overall rating*

38%

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

Variant: Sedan. Engine: 4 Cyl. 2.2 litre.
Kerb weight: 1410 kg Category: LARGE/MEDIUM CAR
Vehicles built: Sep 1998 and May 1999

OVERALL EVALUATION : 2 Stars*

The Leganza did not perform well in the offset crash test. The passenger compartment was substantially deformed. The driver's contact with the airbag was unstable. The passenger hit the dash, with a moderate risk of life threatening head injury. Protection from serious leg injury was poor for the driver.

The vehicle performed better in the side impact crash but there was a high risk of life threatening chest injury for the driver.

Safety features

A driver's airbag is standard equipment. A passenger airbag is available as part of a safety package costing about \$1500. 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.

STRUCTURE : POOR

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 36cm and was severely folded. The brake pedal moved rearwards by 37cm, ending up within 12cm of the seat. The dash moved 24cm towards the driver. The roof buckled upwards above the driver and the width of the driver's doorway shortened by 19cm. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

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.

RESTRAINTS

Offset crash test

The airbag cushioned the head of the driver but the head then started to twist and rolled off the side of the airbag. The driver's knee hit a stiff metal bracket and tube behind



Offset crash test at 64km/h

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

Side impact crash test (no front passenger)

The driver's head hit the centre pillar then rebounded. The head rocked severely to the left during rebound.

INJURY MEASUREMENTS

Refer to the information sheet "How the tests are done" for more details	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
Head HIC	288	586	224
Acceleration (g@3ms)	49.9	84.4	66.5
Neck - Shear (kN)	-	-	-
Tension (kN)	2.2	1.7	-
Extension (Nm)	-	-	-
Chest - Accln (g@3ms)	49	38.1	-
Compression (mm)	39.8	30.5	48.2
Viscous criterion (m/s)	0.3	0.1	1.02
Abdomen - Force (kN)	-	-	1.3
Pelvis - Force (kN)	-	-	2.3
Upper legs Force			
Left (kN)	6.8	0.5	
Right (kN)	16	5.5	
Knee displ (mm)			
Left	2	0	
Right	8.2	3	
Lower legs Comp			
Left (kN)	3.3	1	
Right (kN)	1.4	1.7	
Index (Upper/Low)			
Left	1.15/1.38	0.4/0.43	
Right	1.07/1.21	0.37/0.54	
Injury Risk#	12%	9.8%	

#"Injury risk" is the probability of receiving a life-threatening injury. It is based on dummy head and chest measurements in the offset test.

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