# **Crash Test Results**

**New Car Safety** 

# **KIA MAGENTIS (LHD)**

2006 on

Front+side+head airbags



Occupant Protection

Occupant Protection Score 28.32 out of 37

Variant: GL LHD Eng: 2.4 litre

Kerb weight: 1440 kg Category: MEDIUM CAR/MPV

Vehicles built: 2006

**Important note**: The *left-hand-drive* European model was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

## **Model History and Safety Features**

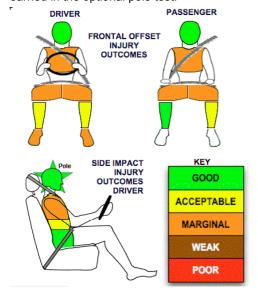
The tested model of Kia Magentis was introduced in Australia during 2006.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard in Australia. Side airbags, curtains and ESC are not standard on all New Zealand variants. Intelligent seat belt reminders are fitted to both front seats.

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. Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

#### **OCCUPANT PROTECTION: 4 Stars**

The Kia Magentis scored 9.99 out of 16 in the offset crash test. The passenger compartment held its shape reasonably well except for footwell deformation. Protection from serious chest and leg injury was marginal for the driver and passenger. The vehicle scored 14.33 out of 16 in the side impact crash test. There was a moderate risk of serious chest injury for the driver. A further two points were earned in the optional pole test.





Offset crash test at 64km/h

# FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.09 pts, upper legs 2 pts, lower legs 1.9 pts.

The passenger compartment held its shape reasonably well in the offset crash test. The brake pedal moved rearwards by 137 mm and upwards 54 mm. The steering wheel hub moved rearwards 20 mm, downwards 13mm and sideways 14 mm. The front ("A") pillar moved 13 mm rearwards. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door.

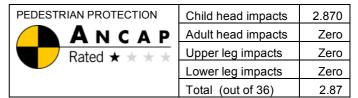
The airbag cushioned the head of the driver and contact was stable. Steering column and dash components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag. Dash and glove box components were a knee injury hazard for the passenger.

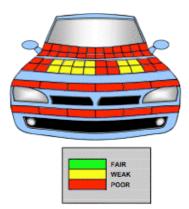
# SIDE IMPACT CRASH TEST (v4.1)

Body region scores out of 4 points each: Head 4 pts, chest 2.36 pts, abdomen 3.97 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

# **PEDESTRIAN PROTECTION RATING (v4.1)**





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PO Box 1555 Canberra ACT Australia 2601 magentis06.DOC

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# **TECHNICAL DATA - KIA MAGENTIS - 2006 on**

## **INJURY MEASUREMENTS**

Body region		Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
		Driver	Passenger	Driver
Head HIC		395	211	53
Acceleration (g for 3ms)		52.9	34.9	22.3
Neck - Shear (kN)		0.49	0.09	-
Tension (kN)		1.15	0.75	-
Extension (Nm)		10.9	12.3	-
Chest Accln (g for 3ms)		-	-	-
Compression (mm)		35.40	31.40	30.20
Viscous criterion (m/s)		0.12	0.22	0.38
Abdomen - Force (kN)		-	-	1.010
Pelvis - Force (kN)		-	-	1.150
Upper legs Force (kN)	Left	2.66	2.58	
	Right	2.75	0.09	
Knee displ (mm)	Left	0.20	0.00	
	Right	1.30	0.00	
Lower legs Force (kN)	Left	1.76	2.69	
	Right	2.39	0.85	
Index (Upper/Low)	Left	0.45 /0.36	0.36 /0.25	
	Right	0.26 /0.45	0.15/0.18	

# Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 2 (see table below for details)

# Modifiers - deductions from offset test scores

Head No deduction
Chest No deduction

Upper leg Variable & conc. loading 2 pt deduction Left & Right

for driver and passenger

Lower leg No deduction Foot score Pedal rearward & blocked Score 1.9 points



## Modifiers - deductions from side impact test scores

Chest No deduction

# Safety features

These specifications are subject to change. Please check with manufacturer for the latest specifications.

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Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution	S/s		
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S (NZ V)		
Side airbags, front seats - chest protection	S (NZ V √)	3 point centre rear seat belt	S		
Side airbags. front seats - head protection	S (NZ V √)	Active head restraints - front seats	S		
Side airbags. rear seats - head protection	S (NZ V √)	Intelligent seat belt reminder - driver	S		
Driver knee airbag	Х	Intelligent seat belt reminder - front passenger	S		
Front seat belt pretensioners	S	Rear seat belt status indicator	Х		

Key:  $\sqrt{\ }$  = Fitted to vehicle that was crash tested (where not standard)

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant

