

Crash Tests

New Car Safety

Kia Rio

03/2007 on 07/2011 - Dual Frontal

Overall Evaluation



Overall Score

23.41 out of 37

Variant: LX 5 dr hatch

Engine: 1.4 litre

Category: Small Car

The left-hand-drive European model was offset-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 Rio was introduced in Australia during 2005. Dual front airbags are standard equipment. Side airbags and head-protecting side curtains are standard on some variants but are not available on others. Antilock brakes (ABS) with electronic brake distribution (EBD) are also standard on some Australian variants and all New Zealand variants. Electronic stability control (ESC) is not available. An intelligent seat belt reminder is fitted to the driver seat. 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. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

Overall Evaluation: 3

3 stars. The Rio scored 11.02 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal for the driver. The vehicle scored 11.39 out of 16 in the side impact crash test. Chest protection was weak for the driver

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.04 pts, upper legs 2 pts, lower legs 2.98 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 68 mm. The throttle pedal moved upwards 34 mm. The steering wheel hub moved 4mm rearward, 53mm upward and 1mm sideways. The front ("A") pillar moved 23 mm rearwards. All doors remained closed during the crash.

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 and passenger knees. The passenger's head was cushioned by the airbag.

Side Impact Crash Test

Body region scores out of 4 points each: Head 4 pts, chest 0.14 pts, abdomen 3.25 pts, pelvis 4 pts.

This rating is based on an ANCAP test of a Rio without the optional side and curtain airbags. The vehicle was therefore not eligible for an optional pole impact test. The Rio with side and curtain airbags earned 4 stars (see separate ANCAP rating).

Pedestrian rating (v4.1)



Child head impacts	8.63
Adult head impacts	Zero
Upper leg impacts	Zero
Lower leg impacts	4.33
Total (out of 36)	12.96

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test aa 50km/h (v4.1) Driver
	Driver	Passn	
Head			
- HIC	357	309	167
- Acceleration (g for 3ms)	46.5	40.8	51.4
Neck			
- Shear (kN)	0.29	0.65	
- Tension (kN)	1.23	1.2	
- Extension (Nm)	9.5	14.2	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	35.71	30.81	33.3
- Viscous Criterion (m/s)	0.01	0.11	0.47
Abdomen			
- Force (kN)			1.28
Pelvis			
- Force (kN)			2.99
Upper Legs Force (kN)			
- Left	2.5	1.82	
- Right	2.54	0.43	
Knee Displacement (kN)			
- Left	1.86	3.94	
- Right	0	0.28	
Lower Legs Force (kN)			
- Left	1.45	2.45	
- Right	3	1.98	
Index (Upper Lower)			
- Left	0.23 0.18	0.22 0.26	
- Right	0.63 0.37	0.25 0.19	

Bonus points (maximum 5)

Pole Test: This variant not eligible
Seat Belt Reminders: 1

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable & conc. loading for driver & passenger 2 pt deduction, L & R
Lower leg	No deduction
Foot score	Score 3 pts
Structure	

Modifiers for side impact test scores

Head		
Chest	Backplate & T12 loads	1.6 pt deduction
Upper leg		
Lower leg		
Foot score		
Structure		



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