

Crash Test Results

New Car Safety

KIA RIO

From Aug 2011 Front+side+head airbags



Offset crash test at 64km/h (Euro NCAP)



ANCAP

Rated ★★★★★

Occupant Protection

Occupant Protection Score 34.99 out of 37

Variant: GLS LHD

Eng: 1.2 litre

Kerb mass 1150 kg

Category: CAR - SMALL

Vehicles built: 2011

Tested by Euro NCAP

Important note: The 1.2 petrol left-hand-drive European model was tested by Euro NCAP. ANCAP was provided with technical information which showed that all Australasian variants have comparable occupant protection.

Model History and Safety Features

The tested model of Kia Rio was introduced in Australia during 2011. The rating applies to 5 door hatch, 3 door hatch and sedan variants.

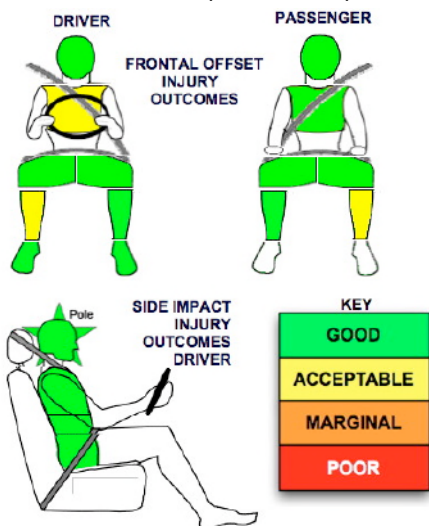
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to all seats.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash.

OCCUPANT PROTECTION: 5 Stars

The Kia Rio scored 14.99 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest and leg injury for the driver.

The vehicle scored 15 out of 16 in the side impact crash test and a further two points in the pole test.



FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.63 pts, upper legs 4 pts, lower legs 3.36 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 45 mm and upwards 23 mm. The steering wheel hub moved 26mm forward, 6mm downward and 6 mm sideways. The front ("A") pillar moved 15 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be opened with high manual effort.

The airbag cushioned the head of the driver and contact was stable. The passenger's head was cushioned by the airbag. There were no knee hazards.

SIDE IMPACT CRASH TEST

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

Euro NCAP found that the rear door was not fully latched after the test and a "door open" modifier was applied.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags. The vehicle earned the maximum two points in this test.

PEDESTRIAN PROTECTION: Marginal

The protection provided by the bumper to pedestrians' legs was predominantly good. However, the front edge of the bonnet was poor in all areas tested and scored no points. Poor protection was also provided by the bonnet in most areas where an adult's head might strike. In the areas where a child's head might strike the bonnet, protection was mixed, some areas offering good protection and others poor.

PEDESTRIAN PROTECTION	Child head impacts	7.31
MARGINAL	Adult head impacts	4
	Upper leg impacts	Zero
	Lower leg impacts	5.41
	Total (out of 36)	16.72
	Tested by Euro NCAP v5.3	



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ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - KIA RIO - From August 2011

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v5.1)		Side Impact Crash Test at 50km/h (v5.1)
	Driver	Passenger	Driver
Head HIC	336	232	76
Acceleration (g for 3ms)	42.5	40.3	27.9
Neck - Shear (kN)	0.40	0.37	-
Tension (kN)	1.97	0.74	-
Extension (Nm)	30.6	20.6	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	24.60	20.97	21.45
Viscous criterion (m/s)	0.12	0.08	0.12
Abdomen - Force (kN)	-	-	0.880
Pelvis - Force (kN)	-	-	1.900
Upper legs Force (kN)			
Left	0.17	2.30	
Right	0.84	0.20	
Knee displ (mm)			
Left	0.00	5.50	
Right	0.50	0.00	
Lower legs Force (kN)			
Left	2.00	2.96	
Right	2.90	1.78	
Index (Upper/Low)			
Left	0.40 /0.34	0.34 /0.25	
Right	0.40 /0.28	0.21/0.19	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 3 (see table below for details)

Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	Score 4 points

Modifiers - deductions from side impact test scores

Door opened during crash 1 pt deduction

Safety features

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

Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution / Brake Assist	S/S/S
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	S	3 point seat belt for all forward-facing seats	S
Side airbags, front seats - head protection	S	Whiplash protection (RCAR protocol)	Pending
Side airbags, rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Intelligent seat belt reminder - rear seats	S

Key:

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

ESC required by ANCAP for 5 star rating from 2008

