

# Crash Tests

## New Car Safety

### ALFA ROMEO 159(LHD)

2006 on

Front+side & head airbags

#### Occupant Protection



**Occupant Protection Score 33.84 out of 37**

Variant: Sedan Eng: 1.9L diesel, manual

Kerb weight: 1550 kg Category: Luxury

Vehicles built: 2005 Test by Euro NCAP

**Important note:** The *left-hand-drive diesel* 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 Alfa Romeo 159 was introduced in Australia during 2006. In Australia the 159 is available with a 2.2 litre diesel engine.

Dual front airbags, driver knee airbag, side airbags and head-protecting side curtains are standard equipment. ABS/EBD brakes and electronic stability control are also standard. Advanced 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 seat belt.

#### OCCUPANT PROTECTION: 5 Stars

The Alfa Romeo 159 scored 15.47 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 and passenger.

The vehicle scored 14.36 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver. A further 2 points were scored in the optional pole test

#### FRONTAL OFFSET CRASH TEST

*Body region scores out of 4 points each:* Head/neck 4 pts, chest 3.80 pts, upper legs 4 pts, lower legs 3.67 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 33 mm and the clutch downwards 18mm. The steering wheel hub moved rearwards 17 mm, upwards 2 mm and sideways 2mm. The front ("A") pillar moved 18 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. A knee airbag helped protect the driver's knees from injury. 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 3.36 pts, abdomen 4 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



Offset crash test at 64km/h

ahead with the pole test and the vehicle earned a further two points.

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver
Head HIC	263	198	21
Acceleration (g for 3ms)	39.8	33.3	13.7
Neck - Shear (kN)	0.59	0.60	-
Tension (kN)	1.14	0.14	-
Extension (Nm)	0.0	13.2	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	23.39	23.19	25.18
Viscous criterion (m/s)	0.05	0.10	0.16
Abdomen - Force (kN)	-	-	0.660
Pelvis - Force (kN)	-	-	1.270
Upper legs Force (kN)			
Left	0.84	0.33	
Right	0.39	0.69	
Knee displ (mm)			
Left	0.28	0.36	
Right	0.95	0.42	
Lower legs Force (kN)			
Left	2.49	1.83	
Right	1.59	2.04	
Index (Upper/Low)			
Left	0.43 /0.17	0.30 /0.26	
Right	0.36 /0.28	0.4/0.2	

#### Bonus points (maximum 5)

Pole Test: 2 pts Seat belt reminders: 2

#### Modifiers - offset test scores

Head	No deduction
Chest	No deduction
Upper leg Variable & conc. loading	No deduction
Lower leg	No deduction
Foot score	Score 4 points

#### Modifiers - side impact test scores

Overall Door opened during crash 1pt deduction

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

Child head impacts	4.28	Upper leg impacts	2.7
Adult head impacts	2	Lower leg impacts	Zero
Total (out of 36)	8.98	★☆☆☆	



**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

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