

# Crash Test Results

## New Car Safety

**FIAT BRAVO/RITMO with ESC (LHD)**  
**2008 on Front+side+head airbags**



Offset crash test at 64km/h (front hubcap dislodged)



**ANCAP** Occupant Protection  
 Rated ★★★★★

**Occupant Protection Score 32.50 out of 37**

Variant: 5 door hatch Eng: 1.9 litre  
 Kerb weight: 1300 kg Category: CAR - SMALL  
 Vehicles built: 2007 Tested by Euro NCAP

**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 Fiat Bravo was introduced in New Zealand during 2007. This model is known as the Ritmo in Australia.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard in New Zealand. ESC is optional on the Emotion variant in Australia and this 5-star rating only applies where ESC is fitted. The Emotion without ESC is a 4-star rating. 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. 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.

### OCCUPANT PROTECTION: 5 Stars

The Bravo scored 12.77 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the passenger.

The vehicle scored 15.73 out of 16 in the side impact crash test and a further two points in the optional pole test.

### FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.29 pts, upper legs 2.29 pts, lower legs 3.20 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved forwards by 78mm. The clutch pedal moved downwards 4mm. The steering wheel hub moved 16mm forward and 3 mm upward. The front ("A") pillar moved 6 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. Steering column components and dash were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag. Glovebox components were a hazard for the passenger's knees.

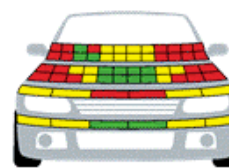
### SIDE IMPACT CRASH TEST (v4.1)

Body region scores out of 4 points each: Head 4 pts, chest 3.73 pts, abdomen 4 pts, pelvis 4 pts.

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

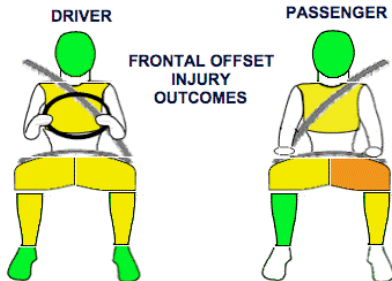
### PEDESTRIAN PROTECTION: 2 Stars

PEDESTRIAN PROTECTION		
 Rated ★★☆☆☆ Tested by Euro NCAP v4.1	Child head impacts	6.5
	Adult head impacts	3.69
	Upper leg impacts	0.37
	Lower leg impacts	5.4
	Total (out of 36)	15.96

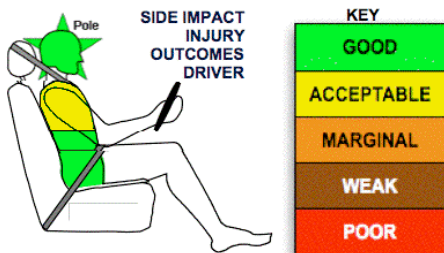


GOOD  
 ADEQUATE  
 MARGINAL

Pedestrian protection



FRONTAL OFFSET INJURY OUTCOMES



SIDE IMPACT INJURY OUTCOMES DRIVER

KEY  
 GOOD  
 ACCEPTABLE  
 MARGINAL  
 WEAK  
 POOR

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 Manuka ACT 2603  
 fiatbravo09.doc  
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**ANCAP**

Crash testing for safety  
 AUSTRALASIAN  
 NEW CAR ASSESSMENT  
 PROGRAM

# TECHNICAL DATA - FIAT BRAVO/RITMO - 2007 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
<b>Head HIC</b>	388	241	25
Acceleration (g for 3ms)	48.3	41.2	16.5
<b>Neck - Shear (kN)</b>	0.54	0.33	-
Tension (kN)	2.03	0.67	-
Extension (Nm)	10.0	10.2	-
<b>Chest Accln (g for 3ms)</b>	-	-	-
Compression (mm)	27.07	22.26	14.24
Viscous criterion (m/s)	0.12	0.09	0.09
<b>Abdomen - Force (kN)</b>	-	-	0.500
<b>Pelvis - Force (kN)</b>	-	-	2.240
<b>Upper legs Force (kN)</b>			
Left	0.38	1.61	
Right	1.44	0.55	
<b>Knee displ (mm)</b>			
Left	1.90	7.60	
Right	2.90	0.40	
<b>Lower legs Force (kN)</b>			
Left	2.08	2.26	
Right	1.88	1.88	
<b>Index (Upper/Low)</b>			
Left	0.43 /0.25	0.37 /0.20	
Right	0.30 /0.58	0.36/0.18	

### 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 loading for driver and passenger	1 pt deduction Left & Right
Lower leg	No deduction
Foot score	Score 4 points

### Modifiers - deductions from side impact test scores

Chest Backplate loading	0.27pt deduction
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### 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)	O# (S NZ)
Side airbags, front seats - chest protection	S	3 point centre rear seat belt	S
Side airbags, front seats - head protection	S	Active head restraints - front seats	X
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	Rear seat belt status indicator	X

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