

Crash Test Results

New Car Safety

MAZDA BT50

From Oct 2011 Front+side+head airbags



ANCAP

Rated ★★★★★

Occupant Protection

Occupant Protection Score 35.72 out of 37

Variant: Double cab, 4x4, Eng: 2.2 diesel

Kerb mass 2090 kg Category: UTILITY

Vehicles built: 2011 Tested by Euro NCAP

Important note: The RHD 2.2 diesel Ford Ranger was tested by Euro NCAP. ANCAP was provided with technical information which showed that all Australasian variants of the BT50 have comparable occupant protection to the tested Ford Ranger.

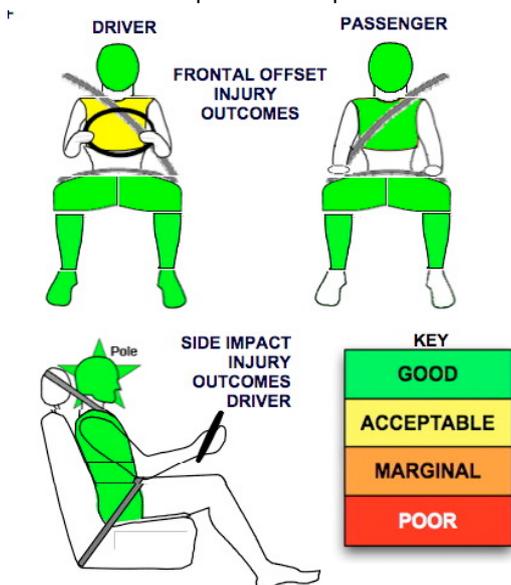
Model History and Safety Features

This Mazda BT50 was introduced in Australia and New Zealand in October 2011. This ANCAP 5-star rating applies to all BT50 variants (all bodystyles, engines, 4X4 and 4X2) sold in Australia and New Zealand.

Dual front airbags, head-protecting side curtains, antilock brakes (ABS), electronic brakeforce distribution (EBD) and electronic stability control (ESC) are standard. Side thorax airbags are also standard except for single cabs with three front seats (bench seats). These variants, with 4 airbags, retain a 5-star rating. Intelligent seat belt reminders are fitted to both front seats of most variants. However single cab variants with three front seats only have a driver seat belt reminder. The overall score for these reduces to 34.72 but they retain a 5-star rating.

OCCUPANT PROTECTION: 5 Stars

The vehicle scored 15.72 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest injury for the driver. The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the pole test.



Offset crash test at 64km/h (Ford Ranger)

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.72 pts, upper legs 4 pts, lower legs 4 pts.

The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 58 mm and upwards 7 mm. The steering wheel hub moved 40mm forward, 2mm downward and 7 mm sideways. The front ("A") pillar moved 2mm rearwards. All doors remained closed during the crash. After the crash the all doors could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. The vehicle tested by Euro NCAP had a driver knee airbag that is not available for Australasian models. However Ford/Mazda provided technical information to ANCAP which demonstrated that the Australasian models of the Ranger and BT50 have comparable upper leg protection to the European model. 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 4 pts, abdomen 4 pts, pelvis 4 pts.

The side impact test simulates a small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the Ranger/BT50. Experience shows that such vehicles can be expected to perform well in this test and the Ranger/BT50 scored full marks.

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

PEDESTRIAN PROTECTION: Not tested

The BT50 has design differences which mean that the Ranger pedestrian protection tests do not apply to this model.

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ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - MAZDA BT50 - From Oct 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	403	297	18
Acceleration (g for 3ms)	52.8	46.7	17.7
Neck - Shear (kN)	0.62	0.36	-
Tension (kN)	1.51	1.03	-
Extension (Nm)	15.9	13.8	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	23.94	21.11	11.25
Viscous criterion (m/s)	0.11	0.12	0.06
Abdomen - Force (kN)	-	-	0.240
Pelvis - Force (kN)	-	-	0.670
Upper legs Force (kN)			
Left	0.66	0.10	
Right	0.96	0.10	
Knee displ (mm)			
Left	0.80	0.10	
Right	0.90	0.20	
Lower legs Force (kN)			
Left	1.72	0.72	
Right	1.91	1.68	
Index (Upper/Low)			
Left	0.27 /0.25	0.28 /0.17	
Right	0.28 /0.24	0.34/0.31	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 2 (except single cabs with three front seats: 1 point)

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

Chest	No 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)	S#
Side airbags, front seats - chest protection	S*	3 point seat belts for all seats	S
Side airbags, front seats - head protection	S	Whiplash protection	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	X

Key: √ = Fitted to vehicle that was crash tested (where not standard) * Not available on single cabs with three front seats

S = standard on all variants

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

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

