

Crash Tests

New Car Safety

FORD COURIER 4x4

MAZDA BRAVO 4x4

1999 on

No airbags

Occupant Protection



Occupant Protection Score 16.49 out of 37

Variant: COURIER GL CREW CAB UTILITY

Engine: 2.5 litre Turbo Diesel, 5 speed manual

Kerb weight: 1710 kg Category: UTILITY

Vehicle built: 6/05

Model History and Safety Features

The tested model of Ford Courier 4x4 was introduced in Australia during 1999. The Mazda Bravo is based on the same design and can be expected to have similar crashworthiness.

Dual front airbags are optional and were not fitted to the test vehicle.

A two point seat belt is fitted to the centre rear seat. This provides inferior protection compared with a three point seat belt. Child restraint anchorages are fitted behind the rear seat but are difficult to reach.

OCCUPANT PROTECTION: 2 Stars

The Courier 4x4 scored 2.62 out of 16 in the offset crash test. The passenger compartment was severely deformed. Protection from serious leg injury was poor for the driver. Head and chest protection were weak for the driver. Chest protection was marginal for the passenger.

The vehicle was awarded a default score of 16 out of 16 in the side impact crash test.

The low offset score limited the overall rating to 2 stars and 16.49 points (the maximum points available for a 2 star rating). This provision was introduced in 2005 and so did not apply to the Bravo/Courier 4x2 utility that was rated by ANCAP in 2002. Test protocols have also changed since 2002.

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 1 pt, chest 0.2 pts, upper legs 1.42 pts, lower legs zero pts.

The passenger compartment integrity was compromised in the offset crash test. The brake pedal moved rearwards by 418 mm and upwards 107 mm. The steering wheel hub moved rearwards 133 mm, upwards 119 mm and sideways 14 mm. The front ("A") pillar moved 227 mm rearwards. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

Steering column components were a potential source of injury for the driver's knees.

SIDE IMPACT CRASH TEST

Default 16 points awarded for side impact test.

The side impact test normally used by ANCAP 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 Courier 4x4. Experience shows that such vehicles can be expected to perform well in this test so ANCAP has decided to award full score for these vehicles instead of conducting a crash test.



Offset crash test at 64km/h

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn eligible vehicles an extra 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	855*	522	Default scores awarded
Acceleration (g for 3ms)	83.3*	70.7	
Neck - Shear (kN)	1.08	0.86	
Tension (kN)	2.47	1.92	
Extension (Nm)	30.9	11.2	
Chest Accln (g for 3ms)	35.700	32.300	
Compression (mm)	34.60	38.90	
Viscous criterion (m/s)	0.14	0.18	
Abdomen - Force (kN)	-	-	
Pelvis - Force (kN)	-	-	
Upper legs Force (kN)	Left 1.98 Right 2.04	Left 1.95 Right 1.79	
Knee displ (mm)	Left 7.31 Right 2.20	Left 11.44 Right 3.18	
Lower legs Force (kN)	Left 9.17 Right 7.74	Left 2.84 Right 2.46	
Index (Upper/Low)	Left 1.34 / 1.34 Right 1.19 / 1.06	Left 0.77 / 0.45 Right 0.32 / 0.4	

* ANCAP did not carry out "steering column faceform" tests as the results would not have changed the overall score. 2 points were awarded for the unmodified head score.

Bonus points (maximum 5)

Pole Test: Not eligible Seat belt reminders: Not fitted

Modifiers - offset test scores

Head	Steer col movement	1pt deduction
Chest	A-pillar movement and loss of structure	2pt deduction
Upper leg	Variable & conc. loading	2 pt deduction L & R
Lower leg		No deduction
Foot score	Pedal rearward	Score zero points
	Footwell rupture	1pt deduction

PEDESTRIAN PROTECTION RATING (v4.1)

Child head impacts	1.22	Upper leg impacts	zero
Adult head impacts	zero	Lower leg impacts	zero
Total (out of 36)	1.22	★☆☆☆☆	



ANCAP

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PROGRAM

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