

Crash Tests

New Car Safety

FORD FALCON BA

2002 on

Dual front airbags

Overall Evaluation



Overall score

27.27 out of 37

Variant: XT sedan

Eng: 6 cyl. 4L

Kerb weight: 1690 kg

Category: LARGE/MEDIUM CAR

Vehicles built: 10/02

Model History and Safety Features

The tested model of FORD FALCON BA was introduced in 2002.

Dual front airbags are standard equipment. Side airbags are standard on some variants and available as an option on others. ABS brakes, an intelligent safety system and a driver's seat belt reminder are standard on all variants.

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. These seat belts also have load limiters. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point seat belt.

OVERALL EVALUATION : 4 Stars

The FORD FALCON BA scored 11.82 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a marginal risk of serious chest injury for the driver and passenger and lower leg injury for the driver.

The vehicle scored 14.45 out of 16 in the side impact crash test. There was a marginal risk of serious chest injury for the driver.

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2pts, upper legs 4pts, lower legs 1.82pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 71mm and upwards 25mm., relative to the driver's seat. By design, the brake pedal hinge separated during the crash, allowing the brake pedal to swing freely. This reduces the risk of lower leg injury. The floor panel separated slightly from the sill but structure was maintained. The feet were protected from footwell deformation by a laminated insert under the carpet. The dash moved 91mm towards the driver. The steering wheel hub moved rearwards 28mm, upwards 20.4mm and sideways 14mm. The front ("A") pillar moved 40mm rearwards. The roof was only slightly deformed. The width of the driver's doorway shortened by 40mm. All doors remained closed during the crash. After the crash all doors opened normally.

The airbag cushioned the head of the driver and contact was stable. The passenger's head was cushioned by the airbag. The passenger's knees hit the glove box.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 2.45pts, abdomen 4pts, pelvis 4pts.

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.



Offset crash test at 64km/h

INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
Head HIC	518	299	119
Acceleration (g for 3ms)	55.2	43	51.1
Neck - Shear (kN)	0.43	0.88	-
Tension (kN)	1.65	1.39	-
Extension (Nm)	36.9	24.6	-
Chest Accln (g for 3ms)	46.6	47.2	-
Compression (mm)	36	31.4	29.77
Viscous criterion (m/s)	0.17	0.19	0.471
Abdomen - Force (kN)	-	-	0.3
Pelvis - Force (kN)	-	-	2.18
Upper legs Force (kN)	0.85	0.19	
Left			
Right	1.1	0.24	
Knee displ (mm)	0.25	0.21	
Left			
Right	1.4	0.16	
Lower legs Force (kN)	1.74	1.85	
Left			
Right	3.07	1.43	
Index (Upper/Low)	0.51/0.23	0.42/0.18	
Left			
Right	0.55/0.89	0.41/0.48	

Bonus points (maximum 5)

Pole Test: Not eligible

Seat belt reminders: 1 pt

The Falcon BA seat belt reminder for the driver was introduced before Euro NCAP published performance requirements for gaining bonus points. The Falcon system meets the intent of the new requirements, although some non-compliance was found, with Ford undertaking to meet all requirements soon.

Modifiers for test scores

Offset crash test

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	Score 4 points
Door opening during crash	No deduction

Side impact crash test

Door opening during crash	No deduction
Back plate load 0.35kN	Not applied

Pedestrian rating (2002 protocol)

2.64 points out of 36 (7%)



Child head impacts 1.42pts; adult head impacts 1.22pts; upper leg zero pts and lower leg impacts zero pts.



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