# **Crash Tests**

# **New Car Safety**

# **FORD FALCON UTILITY (AUII)**

June 2000 on

**Driver airbag** 

#### **Overall Evaluation**



25.18 out of 34

## Overall score

Variant: AUII Eng:6Cyl 4 litre.
Kerb weight: 1630 kg Category: UTILITY
Vehicles built: Aug 2001

#### **Model History and Safety features**

This model FORD FALCON UTILITY was introduced in 2000.

A driver's airbag is standard equipment.

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 and load-limiters are fitted to front seat belts to reduce slack in the event of a severe crash and to limit belt loads on the chest.

#### **OVERALL EVALUATION: 4 Stars**

The FORD FALCON UTILITY scored 10.63 out of 16 in the offset crash test. The passenger compartment was in reasonable shape. There was a moderate risk of serious chest injury for the driver. The vehicle scored 14.547 out of 16 in the side impact crash. There was a moderate risk of serious chest injury for the driver.

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 1.19pts, upper legs 3pts, lower legs 2.48 pts.

The passenger compartment held its shape reasonably well in the offset crash test but there was large movement of the firewall. The road wheel pushed back into the footwell, which ruptured, and the front part of the driver's floor was pushed rearwards 269mm. The brake pedal hinge was designed to break away in a severe crash and the pedal moved freely after the offset crash so it did not affect the score. The dash moved 127mm towards the driver. The steering column separated from the dash structure, as it was designed to do in this type of crash to reduce injury risk and so did not affect the score. The front ("A") pillar moved 135mm rearwards. One of the hinges on the driver's door separated but the door's structural integrity was maintained. The width of the driver's doorway shortened by 128mm. 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 head contact was stable. The driver's knees hit the dash and steering column. The ignition switch barrel was a potential source of knee injury. There were no head strikes for the passenger. The passenger's knees hit the glove box.

#### SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 2.6pts, abdomen 3.95pts, pelvis 4pts.



Offset crash test at 64km/h

The driver's door was pushed inwards moderately. The back of the driver's head glanced the b-pillar.

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, giving a maximum possible overall score of 34 points.

#### INJURY MEASUREMENTS

| Refer to the information<br>sheet "How the test are<br>done" |       |           |           | Side<br>Impact<br>Crash<br>Test at<br>50km/h |
|--|-------|-----------|-----------|--|
|  |       | Driver    | Passn     | Driver                                       |
| Head HIC   |       | 392       | 249       | 76   |
| Acceleration (g for 3ms)                                     |       | 54.8      | 40.6      | 34.7   |
| Neck - Shear (kN)  |       | 0.32      | 1         | _  |
| Tension (kN)   |       | 0.95      | 1.61      | _  |
| Extension (Nm)   |       | 8         | 8         | _  |
| Chest Accln (g for 3ms)                                      |       | 38.9      | 39.1      | -  |
| Compression (mm)   |       | 36.8      | 35.2      | 29   |
| Viscous criterion (m/s)                                      |       | 0.19      | 0.13      | 0.25   |
| Abdomen - Force (kN)   |       | -         | -         | 1.02   |
| Pelvis - Force (kN)  |       | -         | -         | 2.2  |
| Upper legs Force<br>Left                                     |       | 2.62      | 0.09      |  |
| (kN)   | Right | 2.79      | 2.78      |  |
| Knee displ (mm)  | Left  | 0.81      | 0.11      |  |
|  | Right | 3.84      | 0.11      |  |
| Lower legs Force Left  |       | 3.52      | 1.11      |  |
| (kN)   | Right | 4.33      | 1.16      |  |
| Index (Upper/Low)<br>Left                                    |       | 0.53/0.71 | 0.41/0.31 |  |
|  | Right | 0.66/0.48 | 0.34/0.33 |  |

#### **Modifiers for offset test scores**

Head No penalty

Chest A-pillar movement 0.7 pt penalty

Upper leg Variable & conc. loading 1 pt penalty L & R

Lower leg No penalty

Foot score Footwell rupture 1 pt penalty

### Pedestrian rating

12.08 points out of 36 (33.6%)

Child head impacts 4.15pts; adult

\* \*

head

impacts 7.3pts; upper leg zero pts and lower leg impacts 0.63pts.



#### Feb 2002