

# Crash Tests

## New Car Safety

### TOYOTA CAMRY

2000 on

Driver airbag

#### Overall Evaluation



#### Overall rating

21.79 out of 32

Variant: CSI Sedan.  
Kerb weight: 1420 kg  
Vehicles built: 11/00

Engine: 4 Cyl. 2.2 litre. Auto trans.  
Category: LARGE/MEDIUM CAR

#### OVERALL EVALUATION : 3 Stars

The TOYOTA CAMRY performed marginally in the offset crash test (score 7.28 out of 16). The passenger compartment held its shape reasonably well except for footwell deformation. Protection from serious leg injury was poor for the driver.

The vehicle performed well in the side impact crash (score 14.512 out of 16).

#### Safety features

A driver's airbag is standard equipment. A passenger airbag is available with an optional safety package but was not on the tested vehicles.

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 front seat belts to reduce slack in the event of a severe crash. The centre rear seat has a 3-point seat belt.

#### STRUCTURE: ACCEPTABLE

##### Offset crash test

The passenger compartment was held in shape reasonably well in the offset crash test. The front part of the driver's floor was severely folded and pushed rearwards 15cm so that the driver's right foot was almost trapped. The brake pedal moved rearwards 22cm. The dash moved 10cm towards the driver. The roof was starting to buckle upwards above the driver. The width of the driver's doorway shortened by 5cm. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door. The other doors opened easily.

##### Side impact crash test

The centre pillar and the side doors were pushed inwards substantially. The driver's seat was pushed sideways but the seat anchorages held.

#### RESTRAINTS: ACCEPTABLE

##### Offset crash test

The airbag cushioned the head of the driver and contact was stable. During rebound the back of the driver's head hit the centre pillar. The driver's knees came close to hitting a stiff, sharp metal bracket underneath the dash. The passenger's knees hit the glove box and dash.



Offset crash test at 64km/h

##### Side impact crash test (no front passenger)

The driver's head hit the centre pillar then rebounded.

#### 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   | 768                         | 290       | 77                               |
| Acceleration (g for 3ms)                               | 70.6                        | 41.5      | 31.5                             |
| Neck - Shear (kN)                                      | 0.58                        | 0.92      | -                                |
| Tension (kN)   | 1.71                        | 1.58      | -                                |
| Extension (Nm)   | 37.92                       | 21.6      | -                                |
| Chest Accln (g for 3ms)                                | 42.2                        | 34.9      | -                                |
| Compression (mm)                                       | 35.7                        | 34.8      | 19.062                           |
| Viscous criterion (m/s)                                | 0.14                        | 0.1       | 0.19                             |
| Abdomen - Force (kN)                                   | -                           | -         | 1.558                            |
| Pelvis - Force (kN)                                    | -                           | -         | 2.74                             |
| Upper legs Force                                       |                             |           |                                  |
| (kN) Left  | 2.35                        | 0.36      |                                  |
| (kN) Right   | 4.02                        | 1.14      |                                  |
| Knee displ (mm)  |                             |           |                                  |
| Left   | 0.18                        | 0.24      |                                  |
| Right  | 2.36                        | 0.93      |                                  |
| Lower legs Force                                       |                             |           |                                  |
| (kN) Left  | 4.09                        | 1.88      |                                  |
| (kN) Right   | 1.35                        | 1.42      |                                  |
| Index (Upper/Low)                                      |                             |           |                                  |
| Left   | 1.14/1.77                   | 0.33/0.18 |                                  |
| Right  | 0.39/1.16                   | 0.51/0.53 |                                  |

#### Modifiers for offset test scores

|            |                          |                    |
|------------|--------------------------|--------------------|
| Head       | Steering col. movement   | 0.6 pt penalty     |
| Upper leg  | Variable & conc. loading | 2 pt penalty L & R |
| Foot score | Brake pedal movement     | Zero score         |

#### Head restraint position rating: Acceptable

#### Pedestrian rating:



15.42 points out of 36 (42.8%)

Child head impacts 9.16 points; adult head impacts 5.82 points; upper leg impacts 0.43 points; lower leg impacts zero points.



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