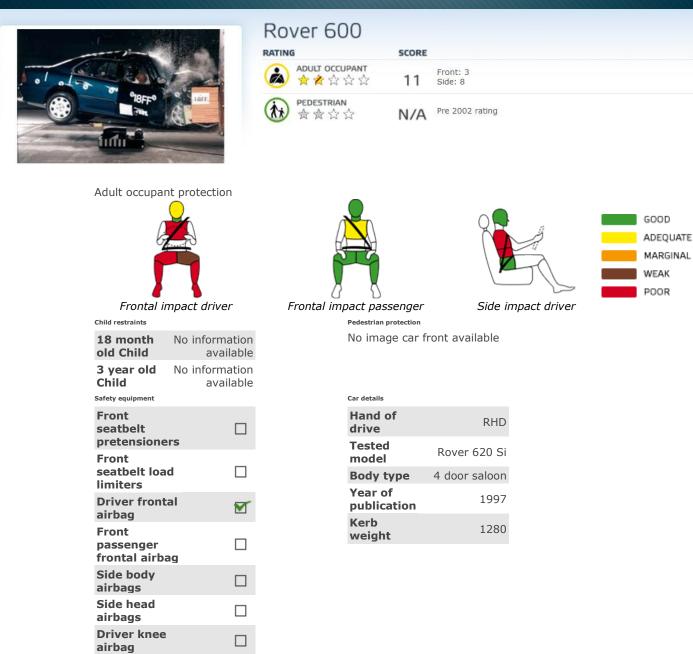
TEST RESULTS





Comments

The 600's passenger compartment became structurally unstable during the frontal impact and the driver ran a high risk of life-threatening chest and abdominal injuries in the side impact. The distance by which the steering wheel was displaced backwards into the cabin during the front impact posed further risks of injury, while stiff structures in the lower facia around the knee impact area increased the likelihood of damage to the driver's knees, thighs and pelvis.

Front impact

The driver's screen pillar was pushed backwards by 215mm (8.5in), the cabin became structurally unstable and the driver's door was severely damaged. This could not be opened by hand, and tools were needed to free it, although the passenger's door could be opened normally. The steering wheel was pushed backwards by 166mm (6.5in) and downwards by 63mm (2.5in). There was also excessive footwell intrusion, with the brake pedal displaced rearwards by 334mm (13.1in). Although head protection in the test was good, the amount that the steering wheel moved could have caused a hazard for shorter or taller drivers so the results were down-graded. The standard-fit airbag worked adequately and neck protection was generally good. The restraint system kept the driver's chest away from the steering wheel but forces transmitted to the chest via the seat belt posed a risk of injury, and the amount of facia intrusion might have made this worse for different-sized drivers. The driver's left knee struck the column cladding and then the facia. If his knee had been in a slightly different position horizontally at the moment of impact, the column adjuster could have been hit, adding to the likelihood of injury. A higher knee position could also have resulted in contact with this adjustment lever or the column support tube. Had the knee



penetrated the facia further, the risk of injury could have increased. In addition, the column adjustment lever, or the column shroud bracket could have caused localised damage to the knee. The driver's right knee scuffed the column shroud and struck the facia. Again, a slightly higher position at the moment of impact could have brought it into contact with the column support tube. If the knee had penetrated slightly further, the probability of injury could have increased still further. Structures present beneath the column cladding could also have worsened any injuries suffered. Lastly, excessive intrusion into the footwell resulted in poor foot and ankle protection. Protection for the front passenger was generally good, although forces transmitted to the chest via the seat belt presented a risk of injury, and there was also a similar risk level noted for the left lower leg.

Side impact

The Rover 600 would have failed next year's side-impact legislation for newly launched models. Instrumentation attached to the dummy's ribs and abdomen gave high readings, indicating that protection for these vulnerable body regions was poor. Protection for the driver's head and pelvis was rated as good, though.

Child occupant

The adult belt's buckle and tongue would not tighten sufficiently to provide a good 'hold' on the child seat. Also, the child seat's front support bar rested on an unsupported part of the Rover's rear seat cushion. This would have compressed downwards during a frontal impact, permitting the child seat to move too far forwards. The front bar could even have slipped over the front edge of the car seat. In the frontal impact, both children in the Rover hit their heads on the front seats. The instrumented dummy experienced high head acceleration, indicating a considerable risk of serious head injury. Since these tests were carried out, Rover has changed the type of child restraint it recommends for use across the 600 model range.

Pedestrian

Child head impact Four of the six test locations met proposed legislation: above the air filter housing, over a bonnet crease, over the high tension lead clip on the rocker cover and at one other point. One performed better than the group average and one was worse: over the highest point on the inner wing. Upper leg impact None of the three tests met proposed legislation and none were better than average. All three tests on the bonnet leading edge were worse than average. Adult head impact Only one test met proposed legislation: above a bonnet crease line. Two points were better than average: above a bonnet strengthener and over a wiper spindle. Three points were worse: above the bonnet hinge, on the rear lip of the bonnet and on a bonnet crease line. Leg impact None of the three tests met requirements and none were better than average. All three tests were worse.