
INSURANCE INSTITUTE FOR HIGHWAY SAFETY

NEWS RELEASE

NEW CRASH TEST RESULTS: TOYOTA CAMRY EARNS 'BEST PICK' BUT HYUNDAI'S SONATA FALLS SHORT ON CRASH PROTECTION

ARLINGTON, VA – January 7, 1997 – Crash test results for the newly designed Toyota Camry and Pontiac Grand Prix plus the Hyundai Sonata add to earlier results for midsize 4-door cars (see attached list). The Insurance Institute for Highway Safety now has evaluated important aspects of the crashworthiness of 19 midsize models from 13 manufacturers. These models account for about 25 percent of new car sales.

The principal component of the evaluations is a 40 mph frontal offset crash test of each model, and results show a wide range of performance when it comes to protecting people in serious frontal crashes.

Among the latest cars evaluated, the new Camry is the best performer in the crash test. Its performance along with acceptable head restraint design and bumper performance earn the Camry a "best pick" evaluation. Other best picks are current models of the Ford Taurus, Chevrolet Lumina, and Volvo 850 evaluated earlier. The Grand Prix earns an evaluation of "acceptable," just missing a better result, but the Sonata's overall crashworthiness evaluation is poor (see attachments).

"The new Camry, Taurus, Lumina, and Volvo demonstrate the crashworthiness automakers can, and should, achieve with all of their midsize models," Institute President Brian O'Neill points out. "Unfortunately, we still have too many poor performers like the Sonata."

The Sonata joins 6 other midsize 4-door cars with poor evaluations: Nissan Maxima, Chrysler Cirrus/Dodge Stratus/Plymouth Breeze, Mitsubishi Galant, Chevrolet Cavalier/Pontiac Sunfire, Volkswagen Passat, and Ford Contour/Mercury Mystique.

How Researchers Assess Vehicle Performance in the Offset Test

Institute researchers use the 40 mph offset crash test to evaluate three important aspects of crashworthiness – how well vehicle structure manages the energy of the crash, the risk of injury measured with a dummy representing an average-size male driver, and how well dummy movement is controlled during the impact.

Essentially the same test is used to evaluate new cars by the British government and by a consortium of state governments and motor clubs in Australia. In addition, the Institute's crashworthiness evaluations reflect the adequacy of front-seat head restraint designs and bumper performance in a series of four low-speed (5 mph) impacts. Poor results in the federal government's crash test also may influence a vehicle's overall evaluation.

Vehicle structure, restraints, and injury measures in the 40 mph frontal offset test are evaluated separately – even though they're related – because good performance for any one of the three by itself in a single test isn't sufficient to reliably indicate good crashworthiness.

Institute and Government Crash Tests Complement Each Other

The federal government has been testing new passenger vehicles in 35 mph crash tests since 1978. This New Car Assessment Program has been a major contributor to crashworthiness improvements – in particular, improved restraint systems in new passenger vehicles. The Institute's offset test, which involves 40 percent of a vehicle's front end hitting a deformable barrier at 40 mph, complements the federal test involving the full width of the front end hitting a rigid barrier. The government test is especially demanding of vehicles' restraint systems but not so much so of vehicle structure. An offset test is more demanding of vehicle structure.

Video news release available. It includes crash test footage, related videotape, and SOTs (Institute President Brian O'Neil).

**For a copy of the report: Crashworthiness,
Post Office Box 1420, Arlington, VA 22210.
On the Internet: <http://www.hwysafety.org>**