

# INSURANCE INSTITUTE FOR HIGHWAY SAFETY

## NEWS RELEASE

Tuesday, April 7, 1998

### **CHEVROLET S-10 BUMPERS ARE 'THE BEST OF A BAD LOT,' BUMPERS ON TOYOTA TACOMA WORST AMONG PICKUPS**

ARLINGTON, VA — In four crash tests at only 5 mph, the 1998 Toyota Tacoma pickup truck racked up more than \$4,000 damage. The best small pickup tested, Chevrolet's S-10 model, sustained more than \$2,000 damage in the same four tests conducted by the Insurance Institute for Highway Safety. Two other 1998 model pickups didn't perform a lot better than the Tacoma.

"The bumpers on pickups are stiffer than on cars. They absorb the energy of a low-speed collision by allowing unnecessary and expensive vehicle damage," explains Institute Senior Vice President Adrian Lund. He adds that "the stiff rear bumpers on pickups transmit the energy of even minor impacts into the vehicles' frame rails. Backing into a loading dock as slowly as 5 mph, for example, can cause damage as far forward as the cabs of some pickups."

#### **5 MPH CRASH TEST RESULTS: 1998 SMALL PICKUPS**

	Front Into Flat Barrier	Rear Into Flat Barrier	Front Into Angle Barrier	Rear Into Pole	Total
<b>Chevrolet S-10 LS</b>	\$461	\$30	\$1,410	\$345	\$2,246
<b>Ford Ranger XLT</b>	\$180	\$312	\$1,371	\$1,089	\$2,952
<b>Dodge Dakota Sport</b>	\$367	\$1,250	\$1,095	\$1,151	\$3,863
<b>Nissan Frontier XE</b>	\$908	\$339	\$1,547	\$1,073	\$3,867
<b>Toyota Tacoma</b>	\$1,058	\$827	\$2,179	\$297	\$4,361

Note: Repair costs reflect January 1998 prices.

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Front bumpers are inadequate, too. They allow damage to safety systems like headlight assemblies as well as expensive body panels.

The result is that the S-10 is "the best of a bad lot when it comes to the bumpers." The series of four crash tests includes front and rear flat-barrier impacts plus two localized impacts, front-into-angle-barrier and rear-into-pole. All four tests are conducted at 5 mph, little more than walking speed.

### **Comparison with Car Bumpers**

Car bumpers are required by federal regulations to resist damage to the vehicles' bodies in collisions at 2.5 mph. Most car bumper systems include foam or other means to absorb low-speed crash energy with little or no damage, and these bumpers often protect cars in impacts at higher speeds than specified in the minimum federal requirements.

But pickup trucks aren't subject to any federal bumper requirements, and energy-absorbing materials "are nonexistent. Instead, the bumper systems on pickups consist of rigid bars attached directly to vehicle frames. There's nothing designed to absorb the energy of the crash without damaging the vehicle," Lund points out. "So in most cases, this energy is transmitted by the bumper system directly to the body of a pickup. The result is expensive-to-repair damage to fenders, grilles, hoods, tailgates, and other body parts."

### **Damage Extends Beyond Bumpers**

There was damage beyond the bumper system and into sheet metal parts of the Nissan Frontier and Tacoma after the simplest test, front-into-flat-barrier. In the rear-into-flat-barrier test alone, the Dodge Dakota sustained more than \$1,000 damage.

A problem for the Dakota and Tacoma was that when the rears of these vehicles struck the barrier, the truck cabs slammed back into the cargo beds (cabs and beds are

mounted separately). This damaged both the cab and the bed on the Dakota and the cab of the Tacoma. The Tacoma's transmission mount also was damaged.

None of the five pickups sustained less than \$1,000 damage in the front-into-angle-barrier test. The Tacoma sustained more than \$2,000 damage, in part because the air conditioner condenser had to be replaced. There was no damage to the metal condenser tubing, but a broken plastic bracket on the unit couldn't be replaced without replacing the whole condenser.

Every pickup sustained damage to one or more front lamps in the angle-barrier impact. Headlights had to be replaced on three pickups – the S-10, Dakota, and Frontier. After the rear-into-pole test, tailgates on the Frontier, Dakota, and Ford Ranger had to be replaced.

"People may think pickup trucks are tough. But they quickly find out this isn't true when they bump into something at a slow speed and then have to shell out thousands of dollars to repair the damage," Lund concludes.

**End 3-page release on pickup truck bumpers.**

**Video news release on Tues., April 7, 1998:  
1:00-1:30 p.m. EDT; Galaxy 9/Transponder 1;  
Footage of 5 mph crash tests & related video**

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