

In Support of Seatbelts

by Gary Witzenburg

When I was sixteen years old, my father bought a car with seat belts in it, one of the first. We took it on a long trip and I got used to wearing the belt-so much so that I have felt uncomfortable without one ever since.

Some five years later I had my own car and managed to roll it over into a ditch late one night. The car had come without belts, but I had installed my own and had got into the habit of always putting them on whenever I drove even the shortest distance. Because it was a habit, not a chore I had to think about, my belt was on that night—and it probably saved my life.

The car was a convertible sports model, and it rolled one full revolution and then another quarter-turn onto its side. I grabbed the bottom of the steering wheel, ducked as low as I could and hoped for the best. The belt kept me firmly in place in my seat. Otherwise, I almost certainly would have gone through the top and been pinned underneath the car. A radio I had kept in the glove compartment was later found several feet away in a snowbank.

Yet, according to statistics, a lot of people—as much as 75 to 80 percent of the driving population—continue to be afraid of seat belts, too stubborn to use them, too ignorant of their benefits, or some combination of the above. Many otherwise sane and intelligent people are aware of the belts' lifesaving potential, but they just can't be bothered. "I'm a good driver," they say, "and belts are uncomfortable," or "they wrinkle my clothes." Others cite a story they've heard about a driver who might have been killed if he or she had had the belts on when a particular mishap occurred. What if the car is under water or catches on fire, and I'm trapped by the belts?" they argue. Some even believe that it's safer to be thrown out of a car in a wreck than to stay in it.

But facts don't lie, and the fact is that wearing a seat belt is considerably safer than not. Chances are that strapping yourself into a belt may hurt you 2 percent of the time; the other 98 percent of the time your restraint system, if properly worn, will help.

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Those are pretty good odds, but here's another fact. Say you're going forty miles per hour when you collide head-on with a solid object. In fractions of a second, your car slows from forty miles per hour to zero. But you're still going forty miles per hour, because you weren't attached to the seat and you didn't stop when the car did. Even if you drive carefully and don't have accidents, other people do, and they manage to involve innocent drivers in the process.

Detroit has been placing seat belts in every new car since 1962 and people still don't use them, which is one reason why the federal government has now taken steps to protect those who refuse to protect themselves. Beginning in 1982, the law will require that every new car sold in America be equipped with some sort of passive restraintpassive" meaning that you don't have to take any action to put it on.

One passive restraint, which has already received a great deal of attention is the air cushion or air bag. This is a large, balloonlike device that is inflated (by an explosive charge) fractions of a second after an electronic sensor in your car detects a serious crash. Now if you hit something headon, and the bag works, it will probably save your life.

The problem is that only about onehalf of all fatal accidents are head-on. The other half are side and rear impacts, rollovers, even multiple-impact collisions—and only a tightly fastened seat belt can save you from injury or death in these other types of wrecks, because it keeps you from being bounced around inside the car.

What about passive belts that a person doesn't have to put on himself? Volkswagen offers an optional passive belt on its Rabbit that seems to work pretty well, but it consists only of crosschest belts and a knee pad to prevent front seat occupants from "submarining" under the belts. There is no lap belt provided to keep you in place in side and multiple-impact crashes and rollovers. And it has other drawbacks: If used in a bench-seat car, and one front occupant is considerably taller than the other, the shorter person will end up too far from the knee bolster for it to do its job properly.

A Research Safety Vehicle (RSV) recently demonstrated by Chrysler (in conjunction with Calspan Corporation) looks a little more promising. It has a motorized passive belt and harness system that moves into place after the doors are closed. But safety engineers question whether this type of device will gain acceptance: If nonusers and marginal users of today's restraints won't buckle up and protect themselves, how will they react to being automatically strapped down? Says John G. Haviland, a General Motors staff project engineer in charge of restraint system testing: "Passive belts could increase the feeling of being trapped. They would probably be widely de-

Meanwhile, safety engineers are working to improve the systems we already have, to make them easier to buckle, more comfortable to wear and generally more acceptable to people of all ages, shapes, and sizes.

The general feeling among most experts is that as the lap and shoulder belt systems become more comfortable every year, many more people would become regular or at least frequent users—and the expensive and complicated air bag systems and passive belts may not be needed after all to bring traffic death and injury tolls to more acceptable levels. Happily, there's good cause for their optimism. Research shows that usage is already on the increase, especially among those owning a 1974 or newer car, perhaps becasue the later models have much-improved systems compared to those built prior to that date. One government-sponsored

study, for instance, found that usage rates for cars built since '74 (excluding cars with interlocks) are as high as 40 percent—compared to 20 to 25 percent for the auto population as a whole.

"We are encouraged by that," says Chris M. Kennedy, Chrysler Corporation's safety relations manager, "and we expect that trend to continue upwards." Studies also show that restraint system usage is higher among young people and in smaller cars, probably because older people have grown up without belts and have not made the effort to get used to them, and because drivers and passengers in larger cars get a false sense of security.

So the problem is to get the non-users to try their belts for just a week or two. Belt wearing, say industry experts, is a bit like beer drinking in that you have to acquire a taste for it. Toward this end, industry safety engineers are attempting to design the complaints out of their systems. Says Ford Motor Company safety planning manager Webster C. McDonald: "The borderline person must almost have the restraints fall into place, and if it annoys him at all, he won't use it. We're trying to clean up all those loose ends

Some of the improvements are already appearing in the new cars. For

Simple "single-loop" systems that move the hardware off the floor and out of the way.

- Guide loops to help keep shoulder straps off the wearer's neck.
- Inertia reels that lock less easily when the belts are pulled, and that don't "cinch" themselves tighter as vou drive.
- "Comfort clips" or "window shade"type tension relievers that allow you to adjust the shoulder strap as tightly or as loosely as you like.

So if you haven't given the system in your car a try, or if you've tried it once and rejected it. why not try it again? Check your owner's manual to see what comfort features the system might have, and try adjusting it for maximum comfort. Lap belts should be fairly tight to hold you firmly in place, but shoulder straps work just as well if loosened enough to allow some space between your body and the belt. Smoothing your clothes after the belts are adjusted avoids wrinkling. Also check to see that your shoulder strap allows enough forward motion to let you reach important controls without difficulty. Some older cars have fixed-length shoulder straps, but the newer ones have retractors that allow the strap to slide in and out easily.

And if, after making an honest effort, you still won't use the restraints in your present car, at least do your family and other passengers the favor of encouraging them to buckle up. It may well save their lives some day.

