The Fiery Pinto Saga

Byron Bloch is a court-qualified Auto Safety Expert analyzing the crashworthiness of accident vehicles nationwide. Applying his training in industrial design and human factors engineering, he evaluates unsafe designs and safer alternatives and urges that auto makers adopt safer technologies to prevent crash deaths and injuries.

Byron Bloch color-coded this model of a 1971-1973 Ford Pinto and showed prosecutors the unsafe location of the fuel tank near the rear bumper. Photo by Jaclyn Nash.

The Pinto model that you donated to the National Museum of American History was a focal point of fuel tank safety issues during several highly publicized trials. What was your most memorable case?

It was January 1980. I was testifying as an auto safety expert in the historic “reckless homicide” trial in Winamac, Indiana. In August 1978, three teenage girls had burned to death when their 1973 Pinto was rear-impacted and became engulfed in flames. Indiana recently had adopted a reckless homicide law, and this incident was the first time that an American corporation was being tried on such criminal charges. I believed that this trial finally could convince the auto industry to stop placing fuel tanks in the vulnerable location near the rear bumper.

Immediately after learning of the accident in 1978, I phoned Elkhart County prosecuting attorney Michael Cosentino to tell him the saga of Ford’s knowledge that the Pinto was a fire trap. I volunteered to fly to Indiana, teach him what I knew, and provide key documents. I examined the Pinto’s charred remains and testified to the grand jury, which indicted Ford for recklessly designing the Pinto with a terribly unsafe fuel tank.
You were in the forefront of the fuel tank controversy. How did you correlate vehicle design, safety flaws, and legal action in an effort to bring about change?

Initially encouraged by Ralph Nader, I had been examining accident vehicles nationwide since 1967, when I was 29. I documented many Mustangs, Mavericks, Pintos, Vegas, Gremlins, and other cars that had been in fiery accidents. All had the fuel tank in that unsafe location near the rear bumper. What a stupid design, I thought. The safer location was forward of the rear axle, where it would be better protected by distance and the strong rear axle structures.

In 1973, I testified at a Congressional hearing about unsafe fuel tanks and the need for a rear-impact crash test, and Congressman John Moss demanded that the National Highway Traffic Safety Administration (NHTSA) finally require such a test. In 1975, I redesigned the fuel tank of a Ford sedan and placed it forward of the rear axle, where it survived a 63 mph rear impact crash test, proving the merits of that safer location. In the mid-1970s, I worked on the Grimshaw vs. Ford Pinto fire case in California, which resulted in a record $125 million in punitive damages against Ford. The trial made national headlines, and auto makers must have noticed.

Did public awareness play a role in your safety campaign?

Yes. In 1978, I began presenting my “Auto Safety Reports” on KABC Channel 7 News in Los Angeles and brought my story of unsafe fuel tanks to ABC’s “20/20” program, where it received an Emmy

What was the nature of your testimony, and how did it affect the outcome and legacy of this Pinto trial?

When I testified in the 1980 Winamac Pinto trial, I drew sketches and used the orange scale-model Pinto and a full-sized cutaway car to show why the design was unsafe. Although Ford was acquitted, I believed that this highly publicized reckless homicide trial would be the final straw to convince the auto industry. I was right. Since then, virtually all manufacturers have adopted the safer fuel tank location forward of the rear axle, including the 1981 Ford Escort. Rear-impact fiery deaths once totaled about 700 per year nationwide, but thankfully they are now down to about 100. Simply moving the fuel tank did the job, but there is still more work to do.

Bloch’s site drawing of the 1973 Ford Pinto is blackened with finger marks because he had touched the charred vehicle.