

Ralph's Accident Reconstruction Newsletter

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does the jury or the judge. An attractive animation, right or wrong, can be a powerful tool to a jury full of people who have grown up watching television. There are also new software tools for producing professional-grade animations, but I currently have no plans to invest the time and money to develop that knowledge and skill. If you desire a premium-quality animation for a reconstruction I've done, I can work with an animator to provide an accurate rendition of a collision sequence; please call me if you have any questions about animation.

On a personal level, my wife and I are now legal guardians for Katherine, the grandniece who has lived with us since she was two and a half. She just turned seven. Among other items, we got her two puppies: golden retrievers, who are growing so fast that you can almost sit and watch them. They were four months old between Christmas and New Year's Day.

Some vehicles are now equipped with LEDs for exterior lighting. A recent article described a highway vehicle which had incorporated LED sources for headlights. Some cars and light trucks are using high-intensity discharge (HID) lamps for headlights. They often look bluish at night, because our eyes have become accustomed to seeing the yellow light from conventional incandescent lamps and considering it to be white. The "blue" HID lamps are actually much closer to white light than incandescent bulbs. I have not seen any publications regarding any method of examining an LED assembly or an HID lamp after a crash to determine whether or not it was luminous at impact. Hot shock/cold shock/filament oxidation (or lack thereof) may be the only advantages to conventional, incandescent lamps!

Tire failures as a percentage of in-use vehicles are extremely rare. I still provide failure evaluation services for car/light truck/utility trailer/motorcycle tires. Most tires now are tubeless. If you have a failed tire and desire an analysis, please provide the tire and the rim, including the valve stem. If the tire had a tube, please provide the tube. If at all possible, please include all pieces of the tire. Often, when a tire comes apart in use, the first piece to separate is the one which has the evidence of the cause of the failure. If all you have is a couple of shredded sidewalls, I will not be able to determine the mode of failure of that tire. The reason I want to have the rim is that some tire failures can be caused by size or type mismatch between tire and rim and/or by other improper mounting techniques or procedures. Years ago, I had one case where someone had mounted relatively conventional tires (I have forgotten the details of the size) on eight-inch-wide rims on a Chevrolet Corvette. It wasn't very many miles before one of them failed in the sidewall, through no fault of the tire, which had been designed for a maximum rim width of six inches. The rim can be important. And the valve stem needs to be examined and possibly tested. Most of the tire failures I have investigated were caused by damages attributable to underinflated operation or by foreign-object penetration.

Thank you for reading my current newsletter. Please call me for event data recorder downloads, accident reconstructions, filament examinations, tire or other component failure evaluations, or other vehicle-related services whenever the need arises.

Ralph Cunningham, Inc.
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