



THE IMPORTANCE OF SKIDMARKS

It seems to be common knowledge among lay persons everywhere that skidmarks assist accident investigators in determining vehicle speeds. Actually, skidmarks provide us with a great deal more information than that. They give us information about vehicle positioning, the actions of the driver and the location of the vehicle when a certain driver perceived an event taking place in the road ahead. Taken with other information obtained at accident scenes, skidmarks can often enable the entire event to be reconstructed.

Take an example or two. The skidmarks shown in Figure 1 below were left by a Dodge Aries as it



Figure 1

traveled downhill and crossed the double yellow centerline, colliding in an angled head-on fashion with a Dodge pickup truck. Figure 2 shows the pickup truck angled across its lane of travel, with the Dodge Aries in the ditch. In the lawsuit which followed this incident, it was claimed that the driver of the pickup truck had been traveling in the wrong lane as the driver and his companion searched for groundhogs along a nearby stream. It was further alleged that the driver of the pickup truck had then angled sharply across the road to collide with the Aries. The skidmarks from the Dodge Aries were approximately 160' long and they led directly to the impact location in the proper lane of travel for the pickup truck. A sketch of the accident scenario is included on the second page of this newsletter.

With the use of the skidmarks, it was possible to show that the driver of the Dodge Aries had been traveling at a speed of at least 61 MPH in a 50 MPH zone. The skidmarks clearly demonstrated the manner in which the Aries, beginning in the driver's proper lane of travel, had traveled across

the centerline to collide with the pickup truck. Even more significantly, however, the skidmarks enabled a reasonable



Figure 2

estimate to be made of the location of the Dodge Aries at the point at which the driver began making his decision to apply the brakes and skid. The positions of the pickup truck and the Aries at the point of the beginning of the driver's perception/response time has been included in the sketch. Also included is the approximate limit of the sight of the Aries driver. Using relatively simple engineering calculations, based on the location of the start of the skidmark, the speed of the Aries and an estimate of the driver's perception/response time, it was possible to show that the driver of the Aries could not possibly have been responding to the approach of the pickup truck when he began the process leading to his brake application.

Largely on this basis, the pickup truck was judged not to have contributed to the accident in any manner.

Figure 3 also shows the usefulness of skidmarks. In this instance, a milk truck and a pickup truck were approaching one another in a relatively tight and blind curve. The road featured no centerline. One of the vehicles was over the centerline, which caused the driver of the pickup truck to respond abruptly, whereupon he traveled into a ditch on the outside of the curve and sustained an injury in the process. The red arrows on the photograph show the dual tire skidmarks on the inside of the curve produced by the driver's side wheels of the milk truck. These skidmarks, together with observations regarding tire marks in the ditch on the inside of the curve, provided ample evidence to demonstrate that the driver of the milk truck had been on his own side of the road as he traveled through the curve.



Figure 3

These simple examples illustrate how useful skidmarks can be in understanding what drivers were doing, and perhaps even thinking, at points in time leading up to and during an incident. Unfortunately, with the advent of anti-lock braking systems (ABS), skidmarks are becoming a rare commodity. There are other techniques which

can be used to reconstruct such accidents. However, without skidmarks, the reconstruction is generally more difficult. More significantly, without skidmarks, it is not as easy for a jury to grasp the split-second timing of events which usually takes place in an accident. Therefore, cherish your skidmarks while you have them.

PREIMPACT VEHICLE POSITIONS

