

“KEEPING PACE” - #5

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TRUCK BRAKES:

P.A.C.E. has had two cases the past year where every one of the rear brakes and semi-trailer brakes on a truck had been so completely misadjusted that there was no braking torque at all when the driver first needed to brake hard. Both cases resulted in serious injuries. In both cases the driver had been able to drive forty to sixty miles after picking up the truck from the maintenance shop, because his front wheel brakes had been sufficient for minor braking actions. We represented the plaintiff insurance company in one case and the defendant insurance company in the other. That's our usual average-- 50% subrogation and 50% defendants. We find that our trial testimony follows this same average.

Of course, there remain many trucking accidents where the drivers blame the brakes merely as an excuse. One such case involved the concrete truck shown above, which overturned while negotiating a sharp curve at a freeway exit and slid 140 feet on its side. We righted the truck, drove it, and found that each of its main wheels skidded when the brake were applied. Skidding the wheels is the best possible test of a braking system, because locking up the wheels is the most a braking system can possibly accomplish. Furthermore, this tests the entire braking system at one time.

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TRANSMISSION ANALYSIS:

The photograph above shows a Ford van positioned where it had started to move backward under its own power after the driver stepped out. The van had knocked one of the hangar doors off its track and it had fallen onto a twin engine airplane inside the hangar. It had been claimed that the transmission contained a design or manufacturing defect, but in truth the van had over 120,000 miles on it and its transmission gearshift lever was sloppy from lack of maintenance. The gear shift lever had just not been placed fully into the “PARK” detent.

We trust the cases outlined in these letters are of interest to you and that you will forward any questions or comments on to us.

Sincerely,

Frederick F. Franklin, P.E.
Forensic Engineer