

## COMMERCIAL TIRE DEALER™

# What really causes rubber on the road? *Statistics prove improper tire use, not retread failure, bear the responsibility in most cases*

By E.J. "Ed" Wagner

**R**ubber on the road continues to plague motorists, truckers, governmental agencies and others. The hue and cry is still "those darn retreads," which, fortunately for the retread industry, is off-base more than it is right.

For example, there are still considerable units of rubber/steel treads from passenger car tires on highways, though the number of passenger retreads has dwindled to practically zero. Yet retreads are still pointed to as culprits!

The majority of rubber/steel treads

on the highway are from drive and trailer wheel position truck tires — both new and retreaded.

### The blame game

Various groups and individuals (myself included) periodically review pieces of rubber and steel gathered by highway crews and categorize the pieces into two groups: passenger vs. light truck/truck size, and retread vs. new tire treads.

There are no current national or regional analyses that present a clear, precise picture of what constitutes rubber on the road. However, the



**Did this tire fail due to workmanship/materials or a road hazard? Available statistics seem to prove truck tire failures that leave rubber on the road often are caused by forces beyond the control of tire-makers, retreaders and tire dealers. But try telling that to a jury!**

State of Virginia Department of State Police conducted a two-and-a-half-year-long study of rubber on the road in the late 1990s.

The department issued a report in November 1999 that concluded "the problem of tire debris along the highways is not due solely to retreaded tires." In fact, the study revealed that a small percentage of rubber on the road actually comes from retreads that failed due to manufacturing defects.

"Examination of the debris reveals many of the tires (that fail) are new and have never been recapped. Experts believe failure to maintain sufficient air pressure causes the tire casings to become extremely hot and eventually come apart and spread debris beside the highways."

Though many people erroneously perceive rubber on the road as coming from improperly retreaded tires, "careful research indicates that perception is not reality in the majority of actual cases. New tires will fail the

same as retreaded tires under similar conditions.” Also, as an aside, the report highlighted the experience of the Virginia DOT during a two-and-a-half-year-long study of their experiences with retreads on state vehicles, and found that “the failure rate was less than 1%.”

### Legal ramifications

My own analyses of failed tires from rubber on the road parallel Virginia’s experience. The great portion of all tread failures result from:

- operational abuse, like low air pressure, etc.
- contact with foreign objects, including cuts, impacts and penetrations.

Rubber on the road, in my opinion, is not caused by defective tires, new or retreaded. It is primarily caused by insufficient air pressure. Many truckers fail to verify air pressure on a periodic basis and, as a result, operate their tires from 25% to 50% below required pressure levels.

Tires work well — but only when consistently operated with sufficient air pressure for the loads they carry. Many tire experts tend to group tire failures into four categories:

**Group 1: Tire abuse (75-80%),** which involves tires that have failed due to a lack of operational control such as insufficient air pressure for load carried; mismatched tires on duals; incorrect rim width; mechanical problems with brakes, suspensions and/or alignment; and tread chunking or tearing due to excessive speed.

**Group 2: Contact with foreign objects (20-25%),** which involves tires that have been penetrated by nails, screws, glass, steel, etc.; impact with curbs, rocks and chuck holes; contamination from oil, gasoline, asphalt, etc.; and imbedded stones in tread.

**Group 3: Workmanship/materials (4-5%),** which can involve improper tire repairs, insufficient tread adhesion, open tread/sidewall splices, crooked treads, out-of-round tires, and tread porosity.

**Group 4: Engineering/design and manufacturing (<2%),** which can in-

volve groove cracking due to insufficient under-tread and other problems.

Tire failures usually fall within the first two groups. Occasionally, some will fall into Group 3; Group 4 has exceedingly few failures. It is important to recognize the above groups in order to reasonably and correctly analyze the cause of tire failure — sometimes in the face of pending litigation.

For example, tire experts employed

by plaintiff clients will generally categorize their experiences in Groups 3 and 4. They will tend to focus on the “shortcomings” of a specific tire manufacturer or retread “failure.”

Your own experience will assist in explaining or clarifying a tire failure to a customer or a lawyer. ■

*Ed Wagner, formerly Modern Tire Dealer’s retread/repair editor, “retired” in 2000.*