

RVs—Rolling Time Bombs on U.S. Roadways

By Langdon & Emison

The summer months are popular for cross-country touring in recreational vehicles (RVs), but few owners know the dangers they pose. Many RVs contain design and manufacturing defects that put motorists at risk of severe injury or worse.

RV manufacturers have historically been located in Indiana, which still has the largest concentration of RV manufacturing plants in the country. Some RV factories employ factory workers at very low hourly rates, but provide production bonuses based upon how many RV's the workers can produce each week. Often the production bonuses will far exceed the hourly wage. This results in quantity over quality and safety.

Most RV manufacturers do very little testing. As a result, while RV's look great on the outside, they often have hidden defects that may not be apparent for months or years after the date of manufacture.

RVs comprise a large segment of what is known as incomplete, aftermarket or modified vehicles. According to industry research, more than 9 million U.S. households owned RVs in 2015 and sales continue to surge. In 2014, more than 356,000 vehicles were shipped nationwide, a 116 percent gain since 2009. With the increasing use of these vehicles, litigation over design and manufacturing defects also will continue to increase. Plaintiffs' lawyers must be prepared to identify and prove defects in these vehicles.

RV manufacturers hold memberships in the Recreation Vehicle Industry Association (RVIA) or the Recreational Park Trailer Industry Association. The RVIA is controlled by the industry and as a result, the standards are "industry"-friendly, not consumer-friendly. As a result, when these associations provide labels for RV manufacturers that include certifying that the vehicles meet industry standards, you need to understand that the standards are only as stringent as the industry wants them to be.

In litigating RV and related cases, the technical definition of an RV might come into question. If the RV's width is 8.5 feet or less and interior space is less than 320 square feet, it is classified as a "travel trailer" regulated by NFPA Standard 1192. Units built into this standard by members of the RVIA must be labeled with the RVIA's seal. If the unit can be driven on the highway, it's a motor home regulated by the U.S. Department of Transportation and the National Highway Traffic Safety Administration ("NHTSA"), regardless of size. The NHTSA standards provide additional protection to consumers, but are still minimum standards.

Identifying Potential Defects

Product defects may stem from the incomplete vehicle manufacturer (which supplies the chassis); the final stage manufacturer (which transforms the chassis into a finished vehicle); or the manufacturer involved elsewhere in the process. Because RVs are "homes on wheels" and house generators, propane tanks and appliances, they are also subject to many non-crash-related dangers not found in other vehicles.

In our practice, we have identified a range of RV defects in cases involving structural and crashworthiness issues such as inadequate restraint systems and vehicle stability. But several recent cases have highlighted extremely dangerous fuel system defects that make post-collision fires an imminent danger and put unsuspecting travelers at risk of burning to death.

A fuel system defect in some RVs pertains to the location of the fuel lines. In some RVs, the fuel lines are routed without protection through the driver compartment. Some RVs are designed and manufactured

with the fuel lines located very close to the occupants and within the crush zone of the vehicle. This creates a serious risk of post-collision fire.

Safety engineers have testified that safer alternative designs available to RV manufacturers would drastically reduce the risk of a post-collision fuel-fed fire under the conditions of most accidents.

Case Example

Like fuel lines, causes of explosions and fire include failure to adequately protect or shield the propane tank as well as:

- Improper propane tank installation.
- Improper propane line routing.
- Inadequate or missing safety devices in propane-using appliances or accessories.

In one case involving a woman who was killed in an RV propane explosion, our fire cause and origin expert identified a kinked or crimped propane line and small hole that permitted propane gas to escape into the RV. After finding the source of the explosion, we had to identify why the crimp and hole were created and not remedied during the manufacturing process.

After inspecting the manufacturing plant and deposing several employees, we learned there were no blueprints for workers to follow when assembling the final-stage RV. Workers building the RVs were paid bonuses for the quantity of vehicles produced, while the quality of the work went uninspected and untested. In a non-collision situation RVs should not present a risk of fire or explosion.

When on the roadway, RVs should not catch fire in an otherwise survivable collision. Manufacturers must protect the fuel and propane systems against collisions that occupants would otherwise survive. As RV sales continue to grow, so will injuries and deaths related to defects.