The Fiery and Predictable Consequences of Rear-Mounted Fuel Tanks

BY JEB BUTLER

Excepting the fiery consequences, the scene was unremarkable. The Belli family was driving south on Interstate 85 through Atlanta, Georgia in their Jeep Cherokee. A wreck had occurred ahead of them and a vehicle was parked on the side of the road. The Bellis slowed down to avoid hitting the parked car and, when they slowed, another vehicle struck their Cherokee in the rear. Rearend collisions like this occur every day on American roads. The consequences need not be – and normally are not – catastrophic.

Above is a rear view of a Jeep with a rear-mounted fuel tank. The tank has been painted white in this photograph for ease of identification.

But for the Belli family, Chrysler's design decisions changed those consequences. Like all automobile manufacturers, Chrysler recognizes that the vehicles it makes will be involved in wrecks. Like all automobile manufacturers, Chrysler has a choice with regard to where it places the fuel tank: Chrysler can place a fuel tank someplace that is protected from impact, or someplace that is vulnerable to impact. Tragically, Chrysler chose option number two in many of its Jeep-branded vehicles. Specifically, Chrysler placed the fuel tanks in the Jeep Cherokees (and several other Jeep models) behind the rear axle and next to the rear bumper where it was vulnerable to rupturing in rear impacts. As a consequence, when the Bellis' Jeep was rearended on Interstate 85, the tank ruptured and the Jeep burst into flames. Mrs. Belli and her daughter died on the scene, and Mr. Belli died after eleven days in a hospital burn unit.

Recognizing the Problem

When lawyers confront a case like the Bellis,' the most important thing is the first thing: recognizing the problem. Although the driver of the vehicle that struck the Bellis was a proximate cause of the *wreck*, he was not the sole proximate cause of the Bellis' *deaths*. Had the fuel tank been in a safe location, there would have been no fire. Had the Jeep not caught fire, the Bellis would have sustained comparatively minor injuries. Therefore, the primary cause of the Bellis' deaths – as distinct from the relatively minor injuries they would have sustained without a fire – was not the striking driver, but Chrysler's decision to leave the fuel tank vulnerable in rear impact. The law refers to this principle as "crashworthiness": in foreseeable impacts, your car should protect you, not endanger you.[1]

Although identifying the failure in an automotive product liability case can be difficult, it is always worth looking if injuries are severe. For instance, when a

tire fails and the tread comes off, causing a rollover or collision, investigators sometimes do not recognize that the tire failure caused the wreck. When a seat belt fails and allows an occupant to be ejected, investigators sometimes assume that the occupant was not belted and do not recognize that the seat belt actually failed. Fire cases – specifically, "post-collision fuel-fed fire cases," as they are known – are easier to recognize. If the vehicle catches fire after the wreck, investigators and attorneys should evaluate the vehicle's fuel system (and, as in all potential product liability cases, secure the vehicle as evidence). The design that Chrysler chose for many of its Jeeps – placing the fuel tank next to the bumper – raises suspicions immediately.

Design History

In automotive product liability cases, evaluating design history is important for three reasons. First, designs that *predate* the vehicle at issue can reveal what the automaker knew when it selected the design of the subject vehicle. Second, designs that *postdate* the subject vehicle can be relevant to a manufacturer's knowledge of the danger among other considerations. Third, designs of *contemporaneous* vehicles can show what safer design alternatives the manufacturer could have selected.

In the context of the rear-fuel-tank Jeeps, the design history is important for all three reasons. First, well before Chrysler manufactured rear-tank Jeeps in the 1990s and 2000s, automakers had learned that fuel tanks behind the axle were dangerous. The most infamously defective vehicle in American history – the Ford Pinto – proved this point. The dangers posed by the Pinto's rear-mounted tanks are well known to many laypeople, and as early as the 1970s, automakers were taking notice. For instance, in 1978, Chrysler's internal safety engineer L.L. Baker wrote a memorandum to his superiors that expressly referred to the Pinto. Baker concluded that fuel tanks placed "ahead of the rear wheels" were better protected from impact, and urged Chrysler to design its fuel systems that way.[2]

Second, in some jurisdictions, designs that postdate the subject vehicle may be admissible. These designs can be relevant for a variety of reasons, including but not limited to a manufacturer's knowledge of the danger. For instance, two of the Jeeps with rear-mounted tanks were the 1993-2004 Jeep Grand Cherokees and the 2002-2007 Jeep Liberties. In model year 2005, however, Chrysler moved the fuel tank of the Grand Cherokee ahead of the rear axle to a safer "midships" location, and in model year 2008 Chrysler did the same with the Liberty – but Chrysler issued no warnings to owners who were still driving Jeeps with rear-mounted tanks. These subsequent designs demonstrate that Chrysler knew the rear-mounted tanks were unsafe.

Third, contemporaneous vehicles' designs illustrate the design alternatives that were available to the manufacturer. In most jurisdictions, the availability of a safer alternative design is a factor that the jury should consider in determining whether the subject vehicle is defective.[3] With respect to the Jeeps with rear-mounted tanks, numerous contemporaneous designs (by Chrysler and other manufacturers) had safer, midships fuel tanks. The subsequent Jeeps with midships tanks – such as the 2005 Grand Cherokee and 2008 Liberty – show that these contemporaneous midships-tank designs would have been feasible for SUVs of these sizes.

2009 Chrysler Bailout and Chapter 11 Reorganization

As many readers know, Chrysler has now received two bailouts by the federal government: first in 1979, and second in 2009. During the 2009 bailout and Chrysler's related Chapter 11 reorganization, Chrysler underwent a name change from "Chrysler LLC" to "Chrysler Group LLC." That is important for at least two reasons. First, as a result of this and other changes to Chrysler's corporate name and structure, Chrysler now contends that it cannot be liable for punitive damages arising from vehicles that Chrysler manufactured before the 2009 reorganization. Second, in its responses to consumers' discovery requests, Chrysler now recites the changes to its corporate name and structure in a way that could lead some consumer advocates to the erroneous conclusion that Chrysler is either not liable for, or does not possess discoverable documents about, pre-2009 vehicles.

First, the degree to which consumers can hold Chrysler liable for its pre-2009 vehicles depends on a political compromise. As Chrysler was emerging from the 2009 reorganization, Chrysler attempted to shed responsibility for all product liability suits based on vehicles it manufactured before the reorganization. Fortunately, consumer fairness advocates recognized what Chrysler was doing and drew public attention to it. The public outcry was effective. Due in large part to the efforts of the American Association for Justice and other pro-consumer organizations, Chrysler was forced to re-assume civil responsibility for the vehicles it manufactured before its Chapter 11 reorganization. There is a catch, however – "new" Chrysler purported *not* to assume liability for lawsuits based on pre-reorganization vehicles if the lawsuits "include[d] any claim for exemplary or punitive damages."[4] Now, Chrysler contends that it cannot be liable for punitive damages in lawsuits based upon pre-2009 vehicles, and that any claim for punitive damages should cause the entire lawsuit to be transferred to the U.S. Bankruptcy Court in the Southern District of New York where Chrysler's Chapter 11 petition was filed. As to compensatory damages, however, "new" Chrysler remains indisputably liable and no transfer is necessary.

Second, in response to consumers' discovery requests in cases based on pre-2009 vehicles, Chrysler now inserts a lengthy "preliminary statement" that recites some of Chrysler's name changes and reorganizations. Through its history, Chrysler has been variously known as "Chrysler Corporation," "DaimlerChrysler Corporation," "Chrysler LLC," "Old Carco LLC," and (currently) "Chrysler Group LLC." This "preliminary statement" (an excerpt of which is provided below) could lead some consumer advocates to conclude either that the current Chrysler is not liable for defective designs that predated Chrysler's 2009 reorganization, or that the current Chrysler possesses no discoverable information about those designs. Neither of those conclusions is accurate – Chrysler remains liable (at least as to compensatory damages) for its defective vehicles

predating 2009, and Chrysler possesses discoverable information about those vehicles that it must produce upon request.

Federal Regulations

Defendant-manufacturers nearly always attempt to argue that because their product met the federal minimum standards for sale in the United States, the vehicle is safe and non-defective. It isn't just Chrysler – General Motors, Ford, Toyota, Isuzu, Suzuki, Honda, and even tire manufacturers make this argument. To make it, manufacturers rely on the Federal Motor Vehicle Safety Standards ("FMVSS") promulgated by the National Highway Traffic Safety Administration ("NHTSA"), with which vehicles must comply before they can be offered for sale. In the context of Jeeps with rear-mounted tanks, for instance, FMVSS 301 addresses fuel system integrity.[5] This defense argument lacks merit, but unless the relevant evidence is placed before the jury, some jurors may buy into this erroneous theory.

In truth, the FMVSS are only "minimum standard[s]" that vehicles must meet before they can be sold.[6] NHTSA has repeatedly established that "compliance with a Federal motor vehicle safety standard does not presumptively mean that the design chosen by a manufacturer is safe" and that "compliance with a safety standard does not constitute a defense in a product liability suit" as far as NHTSA is concerned.[7] As NHTSA has stated, "[m]anufacturers are free to select designs which exceed those in the safety standards."[8]

In most cases, NHTSA – which is a small, understaffed agency – has taken no action with regard to the defective vehicle. In the case of Jeeps with rear-mounted fuel tanks, however, NHTSA got into gear. In 2009, NHTSA began a "preliminary investigation" into 1993-2004 Jeep Grand Cherokees, all of which had rear-mounted fuel tanks. In 2012, NHTSA upgraded the investigation to an "engineering analysis" and broadened the scope of the investigation to also include 1993-2001 Jeep Cherokees and 2002-2007 Jeep Liberties, which also had rear-mounted tanks. On June 3, 2013, NHTSA formally found that the 1993-2004 Grand Cherokees and 2002-2007 Liberties "*contain[ed] defects related to motor vehicle safety*" and officially requested that Chrysler "*initiate a safety recall of these vehicles.*"[9]

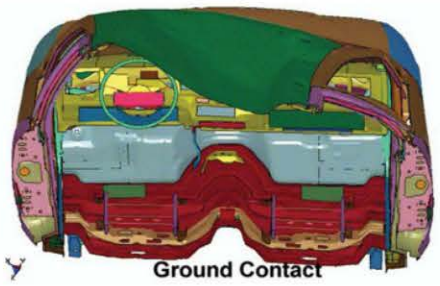
Chrysler purported to respond to that recall request. But the response was far from satisfactory – Chrysler put a band-aid on a wound that needed stitches and a tourniquet. As to 1993-1998 Grand Cherokees and 2002-2007 Liberties, Chrysler announced that it would to install a Chrysler-approved *trailer hitch* on vehicles that didn't have one. As to 1999-2004 Grand Cherokees, Chrysler announced that if a vehicle had an aftermarket trailer hitch, Chrysler would replace the hitch with a Chrysler-approved one, but if the Jeep had no hitch, Chrysler would take no action. This reaction was inadequate by Chrysler's own admissions – Chrysler claimed that the fires about which NHTSA had raised concerns were "high-speed, high-energy collisions" but admitted the trailer hitches would only help in "low-speed impacts."[10] In 2011, Chrysler's former vice president of engineering François Castaing put it bluntly: "[t]he tow package does not protect the tank."[11] Although Chrysler's so-called "recall" may have helped the company's public relations perceptions, it did little to address the real safety problems that its fuel tank placement created. A free tow package doesn't cut it.

"Severe" Wreck

In nearly every automotive product liability case, the defendant-manufacturer will attempt to argue that the wreck was so severe that no occupant could have survived, even if the vehicle had not been defective. Commonly, manufacturers' lawyers ask lay witnesses at trial and at deposition whether they would characterize the wreck as "severe." Because these witnesses have generally figured out that someone was catastrophically injured in the wreck, they sometimes answer "yes" even if the collision forces were not great. A consumer advocate must be ready to explain to the jury, if appropriate, that while the *consequences* of the wreck were severe, the wreck itself would have been survivable if not for the automotive defect.

To prepare for the manufacturer's argument, consumer advocates should consider the objective indicators of severity. Scene witnesses often have important details to offer, and a qualified accident reconstructionist can analyze skid marks, crush patterns, and other evidence to determine how severe the crash forces actually were. Medical or biomechanical evidence – whether from a treating physician or a pathologist who conducted an autopsy – often casts light on which injuries were caused by the collision and which were caused by the product defect.

In some cases (particularly rollovers), computer modeling can show what damage to the subject vehicle occurred, and when it occurred. Certain advanced com-



Above is a screenshot from a computer model that the author's firm used in a recent rollover trial.

puter models can recognize, for purposes of assessing deformation, the different material properties of various vehicle components – for example, that the steel in the A-pillar is stronger than the sheet metal in the roof panel. Many manufacturers use such models to make design decisions and conduct computer-aided testing. There are a few qualified experts in the country who can take a manufacturer's computer model and, taking into account the forces to which the subject vehicle was subjected, reconstruct how the vehicle responded to those forces.

In the context of the rear-tank Jeeps, the truth is plain. Common sense tells us that although it does not require great force to rupture a tank that is mounted next to the rear bumper, it would require tremendous force to rupture a tank that was mounted amidships, forward of the rear axle – as in the 2005 Grand Cherokee or 2008 Liberty. Chrysler's own admissions tell the same story: if the tank fails in "high-speed, high-energy collisions" and also in "low-speed impacts," the problem isn't the speed – it is the tank placement.[12]

Except in truly exceptional collisions, the "severe wreck" argument offers little defense for fuel tanks placed next to the rear bumper.

Conscious Pain and Suffering

In fire cases in which the victim dies, at-fault manufacturers often attempt to avoid responsibility by arguing that the victim died from, or was knocked unconscious by, the initial collision. Manufacturers then argue that because the post-collision fire isn't what killed the victim, or because the victim was not conscious in the fire, the manufacturer should not be liable for the vehicle's defect. Proving the truth about what the victim endured is important for three reasons. First, if the consumer advocate cannot prove that the victim survived the initial collision, the consumer may not be able to recover from the manufacturer at all. Second, pain and suffering in the fire accounts for a significant portion of the damages to which a plaintiff is entitled. Third, in some states, a manufacturer can escape liability for punitive damages if the plaintiff does not show that the victim endured conscious pain and suffering.[13] A skilled consumer advocate can often prove pain and suffering by a combination of direct and circumstantial evidence.

Bystanders who saw or heard the victim inside the burning vehicle can provide powerful, direct evidence of pain and suffering. But observing a vehicle burn with someone inside it – the billowing smoke, orange flames, explosions of tires and gas struts, and intense heat, coupled with hearing the screams of an occupant or seeing an occupant writhe – can understandably disturb witnesses. Bystander witnesses may be reluctant to talk about what they observed, and may become emotional when they do. Asking those witnesses to relive that experience in an interview, at deposition, or at trial is asking a lot. But it can be crucial.

Circumstantial evidence can also be strong. For instance, the position of a decedent's body can reveal that the person was trying to escape at the time of his death. In a Jeep fire case handled by the author's firm, the front of the decedent's body was pressed against his door with one arm extended to the broken-out window – which showed that the occupant had been trying to escape the flames. Although soot in the decedent's airway or elevated carboxyhemoglobin in the decedent's blood can indicate that the decedent was alive and inhaling smoke, those indicators are absent in many vehicle fire cases even where the decedent lived for a significant time in the fire. The reason is that in automobiles, occupants who are trapped in the flames often have access to outside air from a broken-out window or some other source. Thermal exposure, not smoke inhalation, may be the cause of death.

Final Thoughts

Unfortunately, the Bellis are not alone. Across the United States there are hundreds of families that have been torn apart by Chrysler's decision to mount fuel tanks

behind the rear axle and next to the bumper. Seeking justice on behalf of such families is not easy, and it is not quick, but it is worthwhile. Perhaps – hopefully – these Jeeps will be the last passenger vehicles sold in the United States with Pinto-like fuel tanks. They should be. ●

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Endnotes

1 *See Larsen v. Gen. Motors Corp.*, 391 F.2d 495, 502 (8th Cir. 1968) (seminal case).
2 The full text of this memorandum is available online at http://www.autosafety.org/sites/default/files/imce_staff_uploads/BakerFuelMemo1978.pdf.
3 *See, e.g., Banks v. ICI Americas, Inc.*, 264 Ga. 732, 737, 450 S.E.2d 671, 675 (1994).
4 *In re Old Carco LLC*, 09-50002 SMB, 2013 WL 1856330 (Bankr. S.D.N.Y. May 2, 2013); *see* Mike Spector, "Chrysler Got Legal Shield in Chapter 11," Wall Street Journal, April 4, 2012 (available at http://online.wsj.com/news/articles/SB10001424052702304450004577277802983129074).
5 49 C.F.R. § 571.301.
6 49 U.S.C. § 30102(a)(9).
7 Letter Frank Berndt to Daniel Thistle, Jan. 5, 1981 (authoritative NHTSA interpretation letter).
8 *Id.*
9 Letter from Frank Borris II to Matthew Liddane, June 3, 2013 (emphasis added) (available at http://www.autosafety.org/sites/default/files/imce_staff_uploads/ODI%20Jeep%20Recall%20Request.pdf).
10 *Id.*; Chrysler Press Release of June 18, 2013 (available at http://www.chryslergroupllc.com/Investor/PressReleases/ChryslerDocuments/Chrysler%20Group%20and%20NHTSA%20Resolve%20Recall%20Request.pdf).
11 Christopher Jensen, "Chrysler's Solution for Jeep Recall Runs Into Resistance," New York Times, July 12, 1013, available at http://www.nytimes.com/2013/07/14/automobiles/chryslers-solution-for-jeep-recall-runs-into-resistance.html.
12 Letter from Frank Borris II to Matthew Liddane, June 3, 2013 (available at http://www.autosafety.org/sites/default/files/imce_staff_uploads/ODI%20Jeep%20Recall%20Request.pdf); Chrysler Press Release of June 18, 2013 (available at http://www.chryslergroupllc.com/Investor/PressReleases/ChryslerDocuments/Chrysler%20Group%20and%20NHTSA%20Resolve%20Recall%20Request.pdf).
13 *See* Ga. Products Liability Law § 13:8 (4th ed.). As noted above, however, asserting a punitive damages claim against Chrysler for vehicle manufactured before 2009 raises unique bailout-related questions.

Marriages

- GTLA Members Dustin E. Davies and Kristy Sweat were married on April 5, 2014 in Savannah.

Births

- Meredith Parrish and her husband welcomed their third son, Kieran Reilly, on November 5, 2013
- Marion Thomas Pope IV was born on October 7, 2013 to parents Tom and Meredith Pope.
- Mr. and Mrs. George Samuel Nicholson of Augusta, Ga., are pleased to announce the birth of their son, George Samuel Nicholson, Jr., "Sam," born on September 12, 2013, at University Hospital in Augusta, Ga. Sam made his debut at 4:30 p.m., weighed 6 lbs 13 oz., and was 20 inches long.

Charity

- Marietta-based attorney Philip W. Lorenz serves on the Board of Directors for Chebar Ministries, Inc. Chebar Ministries is a faith-based organization dedicated to helping women who have been incarcerated on drug related charges and their families. Chebar is currently in the process of establishing a program at Lee Arrendale State Prison where inmates within 2 years of release will move into a special dormitory, undergo a 6-month training program, and receive support post-release with an intent to help these women get clean, stay clean and keep from being re-arrested and re-incarcerated for drug related activities. Chebar is also in the process of establishing post-release care, including housing, to help these women avoid being re-injected into the same circumstances which got them imprisoned in the first place with the ultimate goal of helping them stay clean and sober and become a productive member of society.
  Donations to assist in this admirable program are gratefully accepted. For more information and to donate online, visit www.chebarministries.org/donate--be-involved.

- Stephen R. Hasner, of Hasner Law, co-founded Rayo de Sol, a ministry in Nicaragua transforming the lives of children through education, nutrition, healthcare and community development. Rayo de Sol believes that development is a collaborative process, requiring meaningful participation of the beneficiaries and communities. Rayo de Sol is currently serving almost 700 children and has plans to add another 500 children in 2014.
  For more information, visit www.rayodesol.net.