"Altered Reality": Hidden Dangers of Modified Products and After-Market Components

by Brett A. Emison

Most cars and trucks on the road are "original equipment" (OEM) vehicles – meaning they were designed, manufactured, tested, and sold by a major automaker (GM, Ford, Chrysler, Toyota, etc.) and unaltered. However, there are millions of vehicles on the road that have been modified or altered before being put into use. Many attorneys who practice products liability litigation are unaware of the rapid growth of the "aftermarket" sector, particularly within the automotive industry, and its impact on product defect claims. From a liability standpoint, those who make modifications to vehicles or design and sell aftermarket parts are really co-designers and co-manufacturers with the original product manufacturer, and thus may be liable in cases of product defect.

There are two broad categories of aftermarket or modified materials: (1) modified products; and (2) aftermarket components. Modified products may have originated as completed original equipment or an OEM body, but have been altered or modified into something different, such as a conversion van, handicapped accessible vehicle, ambulance, or an RV. Aftermarket components are just that: third party (non-OEM) component materials installed on an OEM vehicle.

Blurred Lines between Original Equipment and the After-Market

Many owners of after-market products or components may never know they do not actually own original equipment products. Aftermarket equipment — whether components or completed products — can differ greatly in terms of quality and safety. Aftermarket equipment is not typically subject to the same rigorous safety and testing standards as original equipment components and products. Nevertheless, aftermarket equipment continues to grow and, according to 2010 research from the Automotive Aftermarket Industry Association, aftermarket products represent a $257 billion market in the U.S. This vast market coupled with serious safety concerns results in numerous catastrophic injuries and deaths each year.

When pursuing these claims, there are two general issues:

(1) Aftermarket vehicle modifications using either OEM or non-OEM parts. There are millions of vehicles on the road that have been modified before being put into use. Examples of modified vehicles include conversion vans, recreational vehicles (RV's), ambulances, limousines, handicapped accessible or mobility vehicles, off-road vehicles, mobile lifts, or mobile cranes. Unlike the OEM manufacturers, aftermarket vehicle manufacturers may not be required to comply with the Federal Motor Vehicle Safety Standards (FMVSS).

(2) The aftermarket component itself. It is common for dealerships to do repairs and bodywork on automobiles that have been in crashes. Often these repairs are subsidized by insurance companies who are incentivized to repair a consumer's vehicle for the lowest possible cost. OEM parts are often passed over in these situations, losing out in favor of aftermarket or salvage parts, in order to cut costs where possible.

Aftermarket Products and Safety

After-market product defects are common and the resulting injuries are often catastrophic. However, many times these claims are not identified and these cases not pursued. A proper investigation should be performed to determine whether an aftermarket component or aftermarket modification contributed to cause the injury.

Many aftermarket modified vehicles are not "crashworthy," meaning they will not provide adequate protection in an accident or collision. In some cases, the modifications may actually cause a collision or make otherwise minor injuries worse during a crash.

Aftermarket vehicles may be literally cut apart and put back together again without any blueprints, drawings, testing or safety analysis. Most owners and occupants have no idea the vehicles are not tested for safety.

A 2009 Oklahoma case (*Boeckman v. Newby-Vance Mobility*) involved a young man who burned to death in a Ford van modified for handicapped accessibility. In that case, the victim's family alleged that an aftermarket throttle control system malfunctioned, causing the vehicle to run out of control.[1] Compounding the problem, the aftermarket vehicle modifier moved the fuel tank to accommodate a dropped floor without consulting an engineer or reviewing the vehicle's design documents. Instead, the aftermarket modifier simply cut the vehicle in half, relocated the tank, and

routed an aftermarket fuel filler pipe more than five feet through the van's rear wheel well. In deposition, the person most knowledgeable at the aftermarket modifier testified he did not know how to relocate a fuel tank and had never even heard of Federal Motor Vehicle Safety Standard (FMVSS) 301, governing fuel system performance.[2]

Plaintiffs alleged that, after the vehicle accelerated out of control, it crashed and the aftermarket fuel filler pipe was severed, permitting gasoline to pour out from the fuel system. The fuel caught fire, burning the young man alive as he was trapped inside the vehicle.[3]

As in the Oklahoma case, many modifiers of vehicles with aftermarket parts fail to observe even basic engineering practices. Such conduct, such as failure to have an engineer on staff, failure to consult an engineer when designing the modifications, failure to implement quality or process controls, and failure to test the modifications can have devastating effects on those using the aftermarket and/or modified products.

What a Consumer Should Expect in Aftermarket Equipment

Courts have recognized that, in the aftermarket arena, a product modifier is not exempt from safety standards. This trend was exemplified in April 2011, when a California court found in *Sheridan v. Fladeboe Volkswagen* that even a minor alteration to a vehicle can lead to the modifier bearing responsibility for a defect rather than the OEM.[4]

In *Sheridan*, after a bench trial, the Superior Court of Orange County entered judgment in favor of the plaintiff for more than $12,300 on his action for breach of express warranty and violation of the Song–Beverly Consumer Warranty Act against defendant Fladeboe Volkswagen, Inc. (Fladeboe). The plaintiff had leased a used car from the dealership under a standard-form written lease agreement. However, before leasing the vehicle, Fladeboe had a company called Airstream install an aftermarket audio-visual system. Under the lease agreement, Fladeboe disavowed making any express or implied warranties on the vehicle, although the audio-visual system was covered by a separate express warranty from both Airstream and VW.[5]

The car then lost all power while being driven to Las Vegas and was towed to a Nevada Volkswagen dealership, which determined the cause of the loss of power to be from the aftermarket audio-visual system. Sheridan demanded Fladeboe repair the vehicle and reimburse him for his out-of-pocket expenses. Sheridan was forced to sue Fladeboe and Volkswagen after Fladeboe refused to identify the third-party installer unless Sheridan dropped his claim for reimbursement.[6]

Sheridan's complaint alleged counts for breach of contract, violation of the Song–Beverly Act, negligence, negligent misrepresentation, fraud, and suppression of facts. Following a bench trial, not only did the court award Sheridan more than $12,300 in damages on his breach of contract and Song–Beverly Act causes of action, it also rendered judgment in favor of VW on

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its cross-complaint against Fladeboe, awarding it more than $235,000 in attorney fees.[7]

Fladeboe defended its alteration of the vehicle by arguing that the "[v]ehicle is covered by a limited warranty... provided by the manufacturer." It also argued, "You acknowledge that [y]ou are leasing the [v]ehicle from [l]essor [Fladeboe] 'as-is.' Except as expressly provided under this lease, lessor makes no promise as to the merchantability, suitability or fitness for any particular purpose of the vehicle. This means that there is no promise that the [v]ehicle will be fit for use for any particular purpose or even that it will be fit for the normal purpose for which a vehicle is used." The plaintiff argued in turn that there was a separate express warranty from the AV system (in this case, the aftermarket part that caused the car to cease operation and left the driver stranded), as well as an unwritten warranty by the dealership that authorized the alteration (Fladeboe).[8]

Courts are holding product modifiers accountable and not permitting modifiers and aftermarket modifiers to operate under lower standards of quality and safety. Moreover, in *Skurka Aerospace v. Eaton Aerospace*, an Ohio court found the line itself between the worlds of OEM and "aftermarket" is blurring.[9]

The primary dispute in *Skurka* was whether products used in a cargo conversion airplane constituted an Original Equipment Manufacturer ("OEM") application or an aftermarket application. A "cargo conversion" is understood to be the process of changing a passenger airplane to an airplane capable of transporting cargo. Skurka maintained that products used in a cargo conversion should be considered products used in aftermarket production, while the defendant argued that the products were being used for an OEM application because by altering the airplane from a passenger jet to a cargo plane, the products "created a new aircraft altogether."[10]

In its attempt to classify their production in the aftermarket category, Skurka cited *Merriam-Webster's Collegiate Dictionary's* definitions of the OEM and aftermarket terms. According to Skurka and that dictionary, Original Equipment Manufacturer is defined as "one that produces complex equipment . . . from components usually bought from other manufacturers."[11] Aftermarket, meanwhile is defined as "the market for parts and accessories used in the repair or enhancement of a product . . ."[12] As Skurka stated in its argument, "[c]argo conversion is defined by Eaton to be the retrofitting of an existing passenger aircraft for a different use by, among other things, adding original equipment doors, assemblies and motors."[13]

Skurka therefore argued that the definitions of the terms are not ambiguous and that the plain definitions of the terms reveal that cargo conversions constitute aftermarket uses. The court did not agree and sided with Eaton in denial of partial summary judgment,

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agreeing that a "latent ambiguity" existed in the differentiation. "Even given the definitions of OEM and aftermarket that Skurka proposes, a cargo conversion could constitute either. In a way, it is an original aircraft in that the airplane used to be a passenger plane but after the changes is a cargo plane."

Aftermarket Component Dangers

Insurance companies routinely claim that recycled, reused and/or aftermarket parts are "like-kind and quality" to OEM parts. In fact, many insurers try to require such parts (when state law permits) when making repairs. However, most car makers warn that using aftermarket or salvaged parts may put vehicle owners at risk in an accident or collision.

For example, on November 30, 2010, Toyota announced that it recommend against the use of alternative parts for the repair of Toyota vehicles. "Toyota's recommendation is to use only OEM parts due to the lack of testing and potential safety and performance risk of alternative parts," according to Toyota's press release.[14]

Ford Motor Company issued its own press release regarding non-OEM parts just a day earlier. Ford's aftermarket parts warning included the results of tests performed by Ford's Material Composition and Computer Aided Engineering department comparing OEM bumper beams, bumper isolators, bumper brackets, and radiator supports to their aftermarket equivalents.[15]

The Ford tests found major differences between genuine Ford original equipment replacement parts and aftermarket copies. Ford found that non-OEM parts performed differently in crash tests because the aftermarket parts were not of like kind and quality as Ford's original equipment and certified replacement parts.[16]

Paul Massie, the powertrain and collision product marketing manager at Ford, said the tests "highlight the dangers of being penny-wise and pound-foolish, as less-expensive copy parts could lead to much higher repair costs down the road. All drivers should be aware that copy parts can compromise both the safety performance and the long-term repair costs of your vehicle."[17]

Ford's release stated that "(r)epair estimates show aftermarket copy bumper beams can more than double the repair costs after even a low-speed accident compared to a genuine Ford replacement bumper beam. Aftermarket copy parts are parts unauthorized by the vehicle manufacturer, often constructed with substandard materials in order to be marketed as a cheaper alternative to authorized replacement parts. Ford replacement crash parts, including all structural parts, are identical to those used in new vehicle production and operate seamlessly with the vehicle's safety system."[18]

Representatives of aftermarket product manufacturers quickly responded to the statements by Ford and Toyota. The Automotive Body Parts Association quickly released its own response. Eileen Sottile, co-chair of the ABPA's Legislation & Regulation Com-

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mittee, said:

> "Ford's findings were devoid of any qualitative or quantitative information related to occupant injury or variances in the timing of airbags depending on the use of aftermarket or OEM parts. This should be an eye opener for all consumers. The car companies will shamelessly attack the aftermarket industry and utilize scare tactics to turn consumers away from non-OEM replacement parts. All drivers should be aware that aftermarket parts are often produced by the same manufacturers that supply the car companies and that their safety performance rivals and can even exceed those of OEM parts."[19]

Aftermarket Components and Quality

An aftermarket product or alteration doesn't need to result in an accident to produce harm. In a 2007 class action in Jackson County, Missouri, a jury found that American Family Insurance breached its policy contract with class members and awarded them $17,385,000 in damages. The problem: each insured class member's vehicle had been repaired with aftermarket parts, which were deemed inferior to OEM parts.[20]

The class members (approximately 30,000 Missouri residents insured by American Family Insurance Co. who had automobile property damage claims between May 11, 1990, and December 1, 2004) sought $17,385,000 in parts and omitted repair damages. The value differential in this case was arrived at by evaluating the costs of repairs that the insurance company failed to pay in OEM parts versus the amounts they did pay in aftermarket parts, on each class member's vehicle.[21]

The insureds claimed that the insurance company paid for inferior aftermarket parts to be used to make repairs to their damaged vehicles and systematically failed to pay for repairs that were essential to properly repair their vehicles. The class successfully sued American Family Insurance for breach of contract.[22]

The plaintiffs' primary argument was the inferiority of the aftermarket products. Plaintiffs' reverse-engineering expert testified that the process employed by the aftermarket manufacturers wouldn't yield aftermarket parts "of like kind and quality" to OEM parts. The defendant denied the allegations and unsuccessfully argued that the aftermarket parts were not systematically inferior. The defense mechanical engineer expert and defense mechanical engineer both testified about the inspection of both the aftermarket and OEM parts, and that they were both equal in quality – but the jury's conclusion was that they were not equal. The award of nearly $17.4 million illustrates the liability risks inherent in the utilization of aftermarket parts.[23]

Transparency and Disclosure

According to a 2009 report filed with Connecticut's General Assembly, at least 35 states have enacted statutes or regulations concerning non-OEM aftermarket or reconditioned parts used in vehicle repairs. Legal requirements governing reconditioned and aftermarket components vary by state, but most are a variation of a National Association of Insurance Commissioners (NAIC) model regulation on the subject, according to the report. Of the 35 states identified:

- 31, including Connecticut, require a disclosure statement with the repair estimate concerning the use of non-OEM parts;
- 20 require the manufacturer of the non-OEM aftermarket part to be indentified;
- 13 require the non-OEM parts to be of "like kind and quality" to OEM parts; and
- 6 require a customer's consent before using or requiring the use of non-OEM parts.

Anyone investigating a defect involving aftermarket components should determine whether applicable disclosure requirements were met. In Illinois, disclosure requirements are such that "(s)hould the vehicle be converted, modified or altered in a way other than the manufacturer's original design, the party which performed the conversion or modification shall be liable" under the provisions of the state's Vehicle Buyer Protection Act, "provided the part or parts causing the vehicle not to perform according to its warranty were altered or modified."[24]

Aftermarket Component Parts and Causation

Mata v. Stoneridge, a 2003 trial in Maverick County, Texas, against Stoneridge, Inc., may serve as a good example of what is at stake. In this case, the jury awarded a total of $45 million in damages due to defective design, defective marketing and negligence. The plaintiffs, whose son had died in a Ford F150 crash in 2000 (but was conscious and suffering pain for three minutes after the truck burst into flames), alleged that Stoneridge was negligent in marketing an aftermarket valve without warning against installing the valve on a vehicle equipped with plastic fuel lines.[25]

In *Mata*, the plaintiffs' truck's quick connect fittings would not attach to the Stoneridge aftermarket valve and the only way to install the valve and connect it to the existing fuel lines was by cutting the plastic lines and adding a rubber hose. However, even that configuration would result in a poor and unsafe connection that would be prone to leaking. The plaintiffs argued that Stoneridge was negligent in marketing the aftermarket valve without warning against installing it on a vehicle equipped with plastic lines.[26]

The subject vehicle had two fuel tanks, and at the time of the incident the victim noticed that the fuel was low in one tank, so he flipped a switch to convert to the second tank. A few

minutes later, the truck caught on fire. The victim's family sued Ford Motor Co. (which settled prior to trial) and Stoneridge Inc., based in Warren, Ohio. The plaintiffs alleged that the fire was fuel-fed and originated in the immediate vicinity of the fuel tank selector valve, and that the fire was caused by a defective aftermarket valve used to switch lines between the fuel tanks on the truck.[27]

Instructions provided by the manufacturer specifically directed installers to cut the existing fuel line and use properly tightened clamps and a fuel-approved flexible hose to connect the valve to the fuel system. Evidence pointed to the aftermarket valve being marketed as a universal replacement valve (for $30, compared to a $130 replacement valve at Ford dealerships), that it was sold after 1985 at auto parts stores and that it was installed in the manner in which Stoneridge instructed on its installation sheet.[28]

Stoneridge denied the allegations, and argued that the aftermarket valve was manufactured for use with rubber fuel lines, mainly in specialty vehicles such as ambulances, fire trucks and school buses. Stoneridge maintained that it never marketed the aftermarket valve as a replacement valve for the F-150, contrary to the plaintiff's argument. It also argued that it could not be held liable for failing to warn the plaintiffs because the aftermarket valve could have been purchased from a salvage or junk yard, or it could have been manufactured before the 1985 F-150 was designed. Stoneridge also argued that it was impossible to determine the exact cause or origin of the fire. However, the jury found Stoneridge and its aftermarket part to have caused the fire.[29]

Conclusion

Since insurance companies and product manufacturers continue to cut corners by incorporating aftermarket components rather than original equipment or certified OEM parts, this is at the very least an industry trend that bears watching. It can be effectively argued that courts are lessening the distinction between the OEM and aftermarket camps.

Product manufacturers must be aware of the limitations of aftermarket products and the devastating effects they can have on their users. Product liability practitioners should be aware of these products, their inherent deficiencies, and how courts are viewing their liability, when investigating death and catastrophic injury claims.

Endnotes

[1] *Duane Boeckman and Bernadette Province v. Ford Motor Co., John Vance Auto Group, LLC, John Vance Motors, Inc. d/b/a Newby-Vance Mobility and Newby Mobility, LLC.* Okla. Dist., No. CJ-2007-161.

[2] *Ibid.*

[3] *Ibid.*

[4] *Sheridan v. Fladeboe Volkswagen, Inc.* Nos. G043375, G043706.(Cal.Super. Ct.No. 06CC09510).

[5] *Ibid.*

[6] *Ibid.*

[7] *Ibid.*

[8] *Ibid.*

[9] *Skurka Aerospace, Inc. v. Eaton Aerospace, LLC.* Case No. 1:08 CV 1565. United States District Court, N.D. Ohio, Eastern Division.

[10] *Ibid.*

[11] *Merriam-Webster Collegiate Dictionary*, 11th edition, 2003.

[12] *Ibid.*

[13] *Skurka Aerospace v. Eaton Aerospace*, Pl.'s Memo. in Supp. of Mot. for Partial Summ. Judg., ECF No. 45-1, at p. 2, citing Def.'s Am. Ans., ECF No. 42, at ¶ 44.

[14] http://abrn.search-autoparts.com/abrn/data/articlestandard//abrn/502010/699466/article.pdf.

[15] http://ohsonline.com/articles/2010/11/30/ford-questions-safety-of-aftermarket-parts.aspx

[16] *Ibid.*

[17] *Ibid.*

[18] *Ibid.*

[19] http://www.prnewswire.com/news-releases/abpa-ford-fails-to-make-case-against-aftermarket-parts-after-releasing-critique-devoid-of-data-to-support-its-assertions-111604774.html.

[20] *Nicholas Smith, Amy Johnson and Bryce Johnson, individually and on behalf of others similarly situated v. American Family Insurance Co.*; Mo. Cir., No. 00-CV-211554.

[21] *Ibid.*

[22] *Ibid.*

[23] *Ibid.*

[24] (815 ILCS 380/3) (from Ch. 121 1/2, par. 1203).

[25] *Raul Mata & Nelda Mata v. Stoneridge, Inc. and Ford Motor Co.*, Tex. Dist., No. 01-11-17707.

[26] *Ibid.*

[27] *Ibid.*

[28] *Ibid.*

[29] *Ibid.*

Brett Emison *is a partner at Langdon & Emison. He represents victims and their families nationwide in a variety of personal injury, wrongful death and mass tort litigation including dangerous products, defective automobile design, automobile collisions and fires, semi-truck collisions, railroad crossing collisions, defective and dangerous pharmaceuticals and medical devices, and a variety of other cases.*