

1-1-2005

# Product Liability and Safety Concerns Amid the Growing Custom Motorcycle Industry: Motorcycle Inspections as the Most Effective Solution

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## Recommended Citation

Daniel Weiss, *Product Liability and Safety Concerns Amid the Growing Custom Motorcycle Industry: Motorcycle Inspections as the Most Effective Solution*, 14 U. Miami Bus. L. Rev. 241 (2005)

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**PRODUCT LIABILITY AND SAFETY CONCERNS AMID THE GROWING CUSTOM MOTORCYCLE INDUSTRY: MOTORCYCLE INSPECTIONS AS THE MOST EFFECTIVE SOLUTION**

BY DANIEL WEISS\*

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**I. INTRODUCTION**

The growing custom motorcycle industry is manufacturing and placing products into the stream of commerce that do not meet mandatory state and federal safety standards and thus have defective designs. Through gaps in the existing regulatory scheme, custom motorcycle producers avoid operating as vehicle manufacturers and as a result the industry is able to design, build, title, and sell radical motorcycles that ignore all safety standards applicable to vehicle manufacturers. The custom motorcycle industry’s disregard for mandatory safety standards and proper designs are placing the public at unreasonable risk of injury.

Motorcycle ownership and the consequent usage of motorcycles on America’s highways have grown substantially over the past 10 years. In 2002,

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\* The author of this article has built, customized, modified, repaired and restored Harley Davidson and custom motorcycles since 1983, and has repaired and rebuilt Japanese motorcycles from 1979 to 1983. The author is also a licensed aircraft technician and inspector with over 17 years experience in aircraft maintenance and received his Juris Doctor from the University of Miami School of Law in December of 2005.

the latest statistics available, 5,004,156 street motorcycles were registered in the United States as compared with 3,756,555 in 1994.<sup>1</sup> That represents a 33% increase in registered motorcycles licensed and eligible to drive on roadways within an eight year span. This increased demand has spawned an industry of small, diverse manufacturers who build custom motorcycles designed to push the envelope of beauty, speed, and safety.

Popular television shows airing several times a week, such as The Discovery Channel's *American Chopper* and *Great Biker Build-off*, among others, have introduced custom motorcycles to a wealthier and more diverse clientele. This new market has produced clients that are willing to pay \$25,000 to \$100,000 for sleek two-wheeled machines. As diminutive as a single custom motorcycle manufacturer is, their numbers together are no longer insignificant. There are currently hundreds of custom motorcycle builders in the United States who each produce and sell from five to one hundred motorcycles per year.<sup>2</sup> The following section of this article describes five realistic hypothetical situations that emphasize the gravity of the problem.

## II. HYPOTHETICALS

George Newton just purchased a brand new custom motorcycle built by Vicious Cycle, one of the approximately 8 small independent custom motorcycle builders in his city.<sup>3</sup> It's a beautiful machine; sleek, gleaming

<sup>1</sup> OFFICE OF HIGHWAY POLICY INFO., FED. HIGHWAY ADMIN., U.S. DEP'T OF TRANSP., HIGHWAY STATISTICS 2002 § 2 (2003), available at <http://www.fhwa.dot.gov/policy/ohim/hs02/pdf/mv1.pdf>; OFFICE OF HIGHWAY INFO. MGMT., FED. HIGHWAY ADMIN., U.S. DEP'T OF TRANSP., HIGHWAY STATISTICS SUMMARY TO 1995 § 2 (1996), available at <http://www.fhwa.dot.gov/ohim/summary95/mv201.pdf>; The data from these two websites only represent motorcycles registered with their corresponding state's Department of Motor Vehicles and does not include off-road motorcycles.

<sup>2</sup> There are too many companies to list individually, but over 500 American custom motorcycle builders can be found at the following web sites: Archive of Custom Motorcycle Builders by Bikerlink.com, at [http://www.bikerlink.com/Custom\\_Builders/Builders\\_Alpha\\_AJ.html](http://www.bikerlink.com/Custom_Builders/Builders_Alpha_AJ.html) (last visited Sept. 27, 2005); Archive of Custom Motorcycle Builders by "Because We Ride," at [http://becauseweride.com/links/harley/cust\\_bld.htm](http://becauseweride.com/links/harley/cust_bld.htm) (last visited Sept. 27, 2005); Archive of Custom Motorcycle Builders by bikers-engine.com, at <http://search.bikers-engine.com/cgi/tsearch.cgi?keywords=american+custom+bike+builders> (last visited Sept. 27, 2005); Archive of Motorcycle Manufacturers by Biker Sites, at <http://www.bikersites.com/motorcycle-manufacturers.cfm> (last visited Sept. 27, 2005); Archive of Motorcycle Builders by the Virginia Biker Network, at <http://www.vabiker.net/html/link-23.html> (last visited Sept. 27, 2005).

<sup>3</sup> Vicious Cycle is intended by this author to be a fictitious custom motorcycle shop. This author knows of no motorcycle shop by this name and any reference to a real motorcycle shop is purely coincidental.

with chrome, and very fast, costing over \$28,000. George has owned small dirt motorcycles before but never a large street registered motorcycle. Popular television shows that highlight these custom machines have gotten the better of his curiosity and George Newton is now one of the many new customers fueling this recent craze.

**A.** George is driving his new custom motorcycle down route US 1 in south Florida at about 45 miles per hour, the speed limit, with a smile ear to ear as the neighboring traffic slows to gawk at his beautifully crafted machine. Up ahead at an intersection George sees a car waiting to pull into traffic. However, the driver of the car does not see George, and begins to pull out into George's lane and directly in front of him. George reaches for the horn switch on the handlebar with his thumb to get the driver's attention, but even though there are laws mandating horns on motorcycles, the motorcycle is not equipped with one. George then reaches to flash his high/low beam headlight to warn the intruding car of his presence, but the motorcycle does not have a switch on the handlebar for that function either. George is now right at the intersection as the car pulls out and crashes into him broadside. George is severely injured as he is pinned under his new custom motorcycle, and both are lying sideways on the roadway. The motorcycle's throttle is stuck in the open position because of the accident, and while still in gear, the engine revs at a high rate as the rear wheel spins around wildly, eating into George's calf. George is still barely conscious as he reaches for the engine kill switch on the handlebar to stop the rear wheel from removing more of his leg, but even though handlebar mounted engine kill switches are federally mandated, the custom motorcycle is not equipped with one. George passes out due to a concussion, shock, and loss of blood.

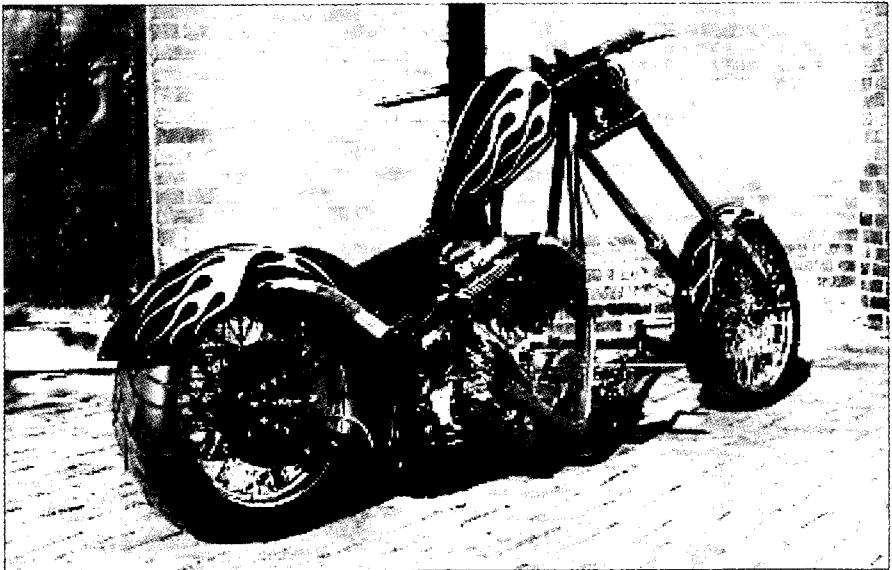
**B.** George Newton is riding down the same road late one Saturday night with his girlfriend on the back of the custom motorcycle, and due to illegally inadequate taillights he is rear ended by a truck delivering Sunday's edition of the Miami Herald to the local stores. The violent impact thrusts George, his girlfriend, and the motorcycle to the pavement at 30 miles per hour. Fortunately the truck stops before running them over; however, both George and his girlfriend are severely injured.

**C.** While changing lanes on Interstate 95 George Newton accidentally cuts in front of a car traveling at a high rate of speed because his custom motorcycle is not equipped with mandatory side view mirrors or turn signals. The two vehicles collide violently and George cannot save the motorcycle from crashing to the asphalt at 65 miles per hour. George suffers severe head trauma, and although his insurance provides him with the best possible medical care, he never awakens from the accident-induced coma.

**D.** While George Newton is traveling down the interstate at 65 miles per hour, the nut on the rear axle comes off because the inexperienced mechanic

who built George's motorcycle forgot to tighten it properly. The rear axle begins to slide outward and the rear wheel cocks slightly sideways, locking up the brakes and slamming George into the asphalt as the neighboring traffic runs over his lifeless body. The initial crash on the interstate causes secondary collisions as a family traveling home from dinner attempts to avoid George and his fallen motorcycle. The family is severely injured. The consequences are devastating to George, innocent motorists, and the families of all involved.

E. George Newton is accelerating the custom motorcycle as he prepares to enter the interstate highway. He must accelerate to keep pace with the traffic already on the interstate with which he plans to merge. George leans the motorcycle to negotiate the banked turn on the cloverleaf entrance ramp, but due to Vicious Cycle's design, the frame of the motorcycle is extremely lowered and the front end is extended, restricting the turning radius of the motorcycle. While George is banking and accelerating (a typical motorcycle maneuver), the frame and exhaust system of his new custom motorcycle scrapes the pavement, kicking the rear end of the motorcycle out from under George. He either crashes right there on the cloverleaf, skidding under the guardrail, or he quickly straightens out the direction of his motorcycle and crashes directly into guardrail anyway. George is once again seriously injured.



George Newton's custom motorcycle.

Hypotheticals A through E raise many questions: How was Vicious Cycle, the manufacturer of George Newton's custom motorcycle, allowed to design, build, title, and then sell a vehicle that lacked minimum mandatory safety features? How did Vicious Cycle bypass basic quality assurance procedures and place an improperly designed and assembled custom motorcycle into the stream of commerce? How many more "Vicious Cycles" exist that place the public at unreasonable risk of injury? How many more potential Georges exist? What legal remedies, if any, do George and everyone injured in the above hypotheticals have against Vicious Cycle? Can Vicious Cycle escape liability? Does Vicious Cycle have the money to compensate for the injuries even if liability attaches? What can be done to prevent the above hypotheticals from happening in the first place? These questions and more are answered in this article.

### III. DISCUSSION

The custom motorcycle industry was not born overnight. Since the 1960's, motorcycle enthusiasts have designed and built their own versions of ultimate riding machines, or choppers, and legally registered these radical motorcycles for their own personal highway use. Other motorcycle enthusiasts have taken existing motorcycles, completely customized them, and rebuilt the motorcycles to their own design. Since 1971, *Easyrider Magazine* has published a monthly issue dedicated to the custom motorcycle enthusiast, and chronicled the flourishing industry over the past 33 years.<sup>4</sup> There are currently over ten national magazines solely dedicated to custom motorcycles.<sup>5</sup> The recent increase in demand for custom-built motorcycles, coupled with the growing consumer base's lack of knowledge, time, or tooling to build their own bikes, has spawned a custom motorcycle production industry with companies that build motorcycles outside federal and state motor vehicle equipment standards. Many custom street motorcycles built and sold to the public by hundreds of small independent companies now lack mandatory safety features and proper design to travel on highways legally and safely.

The safety issues that plague the custom motorcycle industry do not solely arise from qualified and experienced builders registered as manufacturers who omit certain safety features. The issues also arise from the hundreds of small motorcycle shops that haphazardly attempt to design

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<sup>4</sup> EASYRIDERS, available at <http://easyriders.com>.

<sup>5</sup> The national motorcycle magazines include: HOT ROD BIKES; CROSSROADS; ROBB REPORT MOTORCYCLING; STREET CHOPPER; HOT BIKE; EASYRIDERS; BIKER; IN THE WIND; AMERICAN RIDER; V-TWIN; AMERICAN V.

a radical motorcycle strictly for the aesthetic allure, and then place onto the streets unsafe custom motorcycles capable of speeds well over 100 miles per hour. Many of the custom motorcycles built and sold to the public today undergo no performance testing or quality control other than a novel idea and a pre-build sketch to map out the contours and aesthetics of what the builder thinks will be a beautiful motorcycle. Custom motorcycle builders create outrageous designs on two wheels that have never been tested or even seen before. Since no form of licensing is required to keep unqualified builders from introducing unsafe and radical motorcycles into the stream of commerce, the industry is left open to abuse and places customers and innocent bystanders at an unreasonable risk of serious injury.

The purpose of this article is to propose an effective remedy for a growing public safety issue without substantially burdening the viable and successful custom motorcycle industry. This article will explain why many custom motorcycles are unsafe and how the current system of Federal Motor Vehicle Safety Standards (FMVSS) is ineffective against protecting the public from the defective products created by many custom motorcycle builders. The flaws within the current system are exposed and an explanation given as to how the worst offenders of ill equipped, designed, and manufactured motorcycles are able to bypass statutory safety standards, thereby placing thousands of hazardous vehicles into the stream of commerce and onto the highways. This article attempts to explain, using existing law and real life scenarios, why many people cannot recover damages from injuries sustained as a result of defective products created by the custom motorcycle industry. This article will then propose three systems, all designed to ensure at least minimum safety equipment compliance upon a custom motorcycle's initial introduction into the stream of commerce.

One proposal is designed to create disincentives to build, title, and sell custom motorcycles that put the public at risk, and the other two proposals are designed to regulate the titling of these vehicles by enforcing compliance with safety standards already in existence. Flaws will be exposed in the first two proposals, but the third will permit a viable industry to thrive without substantial hardship and still provide an effective method of regulating consumer and public safety in a rapidly growing industry.<sup>6</sup> In addition to the proposals, a new comprehensive study of motorcycle accidents is needed to determine the extent of the problem.<sup>7</sup>

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<sup>6</sup> This article will not address vehicle identification numbers, emissions and noise level requirements of motorcycle manufacturers because these factors do not affect highway safety.

<sup>7</sup> The last comprehensive motorcycle accident study was the *Hurt Study* performed in 1981, well before the late 1990's and early 2000's proliferation of independent motorcycle builders for profit. HARRY H. HURT ET AL., NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., MOTORCYCLE

#### IV. STATUTORY MOTORCYCLE EQUIPMENT LAWS

Federal Law prohibits the manufacturing of motorcycles that do not comply with all applicable Federal Motor Vehicle Safety Standards ("FMVSS") in effect on their date of manufacture.<sup>8</sup> The FMVSS are enumerated regulations, which specify minimum safety requirements for motor vehicles and are intended to protect the public from unreasonable risk of accidents occurring as a result of design, construction, and performance of motor vehicles.<sup>9</sup> The regulations also exist to mandate safety features that protect the public from unreasonable risk of death or injury should an accident occur.<sup>10</sup> However, it is currently the responsibility of the manufacturer to certify that each vehicle produced meets the FMVSS requirements.<sup>11</sup> It is a self-certification process utilizing a system of civil penalties to induce compliance.<sup>12</sup> Some of the FMVSS that apply to motorcycle manufacturers, and the ones that are frequently disregarded by the custom motorcycle industry, are: (1) a supplemental engine stop control (kill switch) located on the right handlebar;<sup>13</sup> (2) a split braking system, which implies a brake on both front and rear wheels that meet stringent and enumerated performance standards;<sup>14</sup> (3) tail and brake lights located at the vertical centerline of the vehicle not less than 15 inches from the ground (unless 2 are used, then symmetrically about the vertical centerline);<sup>15</sup> (4)

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ACCIDENT CAUSE FACTORS AND IDENTIFICATION OF COUNTERMEASURES, REP. NO. DOT HS 501160 (1981), available at [www.motorcycle-accidents.com](http://www.motorcycle-accidents.com) (follow "Safety Stats" hyperlink). The *Hurt Study* was performed by the University of California with funds from the National Highway Traffic Safety Administration. There is a 2001 report, *Fatal Single Vehicle Motorcycle Crashes*, commissioned by the National Highway Traffic Safety Administration, but it only includes fatal single-vehicle motorcycle accidents, and is therefore not comprehensive for this article's purpose. UMESH SHANKAR, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., FATAL SINGLE VEHICLE MOTORCYCLE CRASHES, REP. NO. DOT HS 809 360 (2001).

<sup>8</sup> 49 U.S.C. § 30112.

<sup>9</sup> NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., QUICK REFERENCE GUIDE TO FEDERAL MOTOR VEHICLE SAFETY STANDARDS AND REGULATIONS, at iii (2003), available at <http://www.nhtsa.dot.gov/cars/testing/ncap/images/fmvss.pdf>.

<sup>10</sup> *Id.*

<sup>11</sup> COMPLIANCE TESTING, OFFICE OF VEHICLE SAFETY COMPLIANCE, NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., at 1 (1998), available at [http://www.nhtsa.dot.gov/cars/testing/comply/mission/1\\_ovsc\\_1.html](http://www.nhtsa.dot.gov/cars/testing/comply/mission/1_ovsc_1.html) (last visited Sept. 28, 2005).

<sup>12</sup> 49 U.S.C.A. § 30165 (West 2005) (subjecting whoever violates FMVSS's to a civil penalty not to exceed \$5,000 for each violation, or \$15,000,000 for any related series of violations).

<sup>13</sup> 49 C.F.R. § 571.123.S5.1 (2005).

<sup>14</sup> 49 C.F.R. § 571.122 (2005).

<sup>15</sup> 49 C.F.R. § 571.108 (2005).



front and rear turn signals;<sup>16</sup> and (5) a minimum of 5 reflex reflectors.<sup>17</sup> In addition, the Office of Vehicle Safety and Compliance (“OVSC”) requires a manufacturer to employ a quality control program to ensure an overall testable and acceptable level of safety regarding the aforementioned FMVSS, although it doesn’t specify the type of quality control program to use.<sup>18</sup>

Pursuant to Chapter 49 of the United States Code Section 30113, a motorcycle manufacturer who produces less than 10,000 units per year and sells less than 2,500 of these units per year within the United States may apply for a temporary exemption and omit one or more of the FMVSS. The exemption is granted if compliance causes substantial economic hardship to a manufacturer who has tried to comply with the standard in good faith.<sup>19</sup> The exemption can also be granted if a comparable safety feature not enumerated in 49 C.F.R. Section 571 is installed which provides a safety level at least equal to that of the required standard.<sup>20</sup> However, this exemption process is virtually irrelevant to the custom motorcycle industry because it usually costs more to build a motorcycle which deviates from the standards than it does to build one that is in compliance. Expensive radical designs, aesthetics, and speed are what drive the industry, not motorcycles which are built more cheaply due to the omission of safety features. The majority of custom motorcycle builders have no interest in trying to comply with FMVSS in good faith as 49 U.S.C. Section 30113 requires, nor do they install safety features that are at least as effective as the FMVSS.<sup>21</sup> After an FMVSS exemption is granted, 49 U.S.C. Section 30113 requires the installation of a permanent label fixed to the motorcycle stating the safety standard from which the vehicle is exempt. There are no exemption stickers affixed to any of the thousands of custom motorcycles that deviate from FMVSS and yet are licensed to operate on the highways.

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<sup>16</sup> *Id.*

<sup>17</sup> *Id.* The regulation requires three red and two amber reflex reflectors. Reflex reflectors are plastic strips that illuminate and reflect the light of an oncoming vehicle’s headlamps.

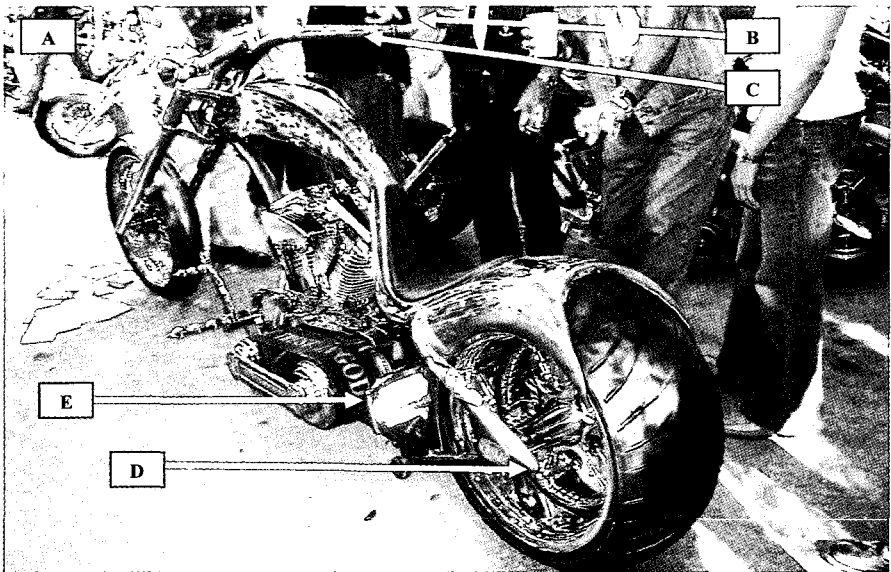
<sup>18</sup> COMPLIANCE TESTING at 1-8 (2005), available at [http://www.nhtsa.dot.gov/cars/testing/comply/mission/1\\_ovsc\\_1.html](http://www.nhtsa.dot.gov/cars/testing/comply/mission/1_ovsc_1.html) (last visited Sept. 27, 2005).

<sup>19</sup> 49 U.S.C. § 30113 (1998). 49 C.F.R. § 555 (2005) lists the strict requirements of exemption applications.

<sup>20</sup> *Id.*

<sup>21</sup> The authority to provide an exemption rests with the National Highway Traffic Safety Administration (NHTSA). According to a telephone interview in September of 2004 with George Fagan at the Office of Vehicle Safety Compliance at NHTSA and a thorough search of the Federal Register, no domestic custom motorcycle manufacturers have applied for and been granted safety equipment exemptions other than reflex reflectors. The exemptions are primarily used by foreign manufacturers importing motorcycles that deviate only slightly from FMVSS.

Individual State Department of Motor Vehicle agencies require even more stringent standards that apply to the driver/owner of the motorcycle and not the manufacturer. However, a manufacturer may owe a duty to motorcycle purchasers to produce motorcycles that conform to all state laws because motorcycles are inherently mobile and are often driven across state lines. Frequently disregarded state equipment requirements include speedometers, odometers, front and rear brakes (again), rearview mirrors, handle bars that do not rise higher than 15 inches from the lowest part of the drivers seat, and passenger footrests and handholds if a passenger is to be carried.<sup>22</sup> The purchaser of a motorcycle in non-compliance with their state equipment laws cannot legally use that motorcycle on the roads of that state or even take their driver's license motorcycle endorsement road test on it. The motorcycle enthusiast has paid \$25,000 to \$100,000 for an illegally non-conforming and unsafe motorcycle.



The above photograph depicts a typical custom motorcycle recently built in Florida by one of the many small shops and registered in the state of Florida in violation of multiple FMVSS and Florida minimum equipment laws.<sup>23</sup> The violations in the photograph are readily apparent to a skilled and

<sup>22</sup> See, e.g., The Motorcycle Safety Foundation, State Laws and Reports, at [http://msf-usa.org/downloads/Equipment\\_Chart\\_2004\\_MSFlgo.pdf](http://msf-usa.org/downloads/Equipment_Chart_2004_MSFlgo.pdf) (last visited Sept. 27, 2005).

<sup>23</sup> The above photograph was taken in Miami, Florida, by the author at the annual Heaven Cycle party in December 2004.

trained eye. The violations are: (1) No supplemental engine kill switch located on the right handlebar (C);<sup>24</sup> (2) no reflex reflectors;<sup>25</sup> (3) taillights located below 15 inches from the ground (D);<sup>26</sup> (4) taillights which can not be seen from a distance of 500 feet in sunlight (D);<sup>27</sup> (5) no horn (A);<sup>28</sup> (6) no turn signals;<sup>29</sup> (7) no mufflers;<sup>30</sup> (8) no rearview mirrors;<sup>31</sup> (9) no multiple beam headlight;<sup>32</sup> and (10) no “squeeze to disengage” clutch lever on the left handlebar.<sup>33</sup> Other dangerous features include the obstructed positioning of the license plate in front of, and partially to the side of, the rear wheel (E), and the potentially hazardous internal handlebar throttle assembly (B).<sup>34</sup> This motorcycle is currently for sale to the public with a price tag of over \$100,000.

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<sup>24</sup> 49 C.F.R. § 571.123.S5.1 (2005). A supplemental engine kill switch is necessary to turn off electrical power to the engine’s ignition system in case of emergency. By turning off electrical power to the engine’s ignition system, the engine will abruptly stop running.

<sup>25</sup> *Id.* at § 571.108.

<sup>26</sup> The federal standard requires taillights to be located at a minimum of 15 inches from the ground. *Id.* at § 571.108 (2005). However, this motorcycle is registered in Florida, which requires a more stringent standard: taillights must be located at a minimum of 20 inches from the ground. FLA. STAT. ANN. § 316.410 (West 2005).

<sup>27</sup> FLA. STAT. ANN. § 316.234 (2000).

<sup>28</sup> Florida requires all motorcycles to be equipped with a horn. FLA. STAT. ANN. § 316.455 (1999). Federal regulations stipulate that if a motorcycle is equipped with a horn, the control for the horn shall be a “push to activate” button located on the left handlebar. 49 C.F.R. § 571.123.S5.2.1. The purpose of the federal standard is “to minimize accidents caused by operator error . . . by standardizing certain motorcycle controls and displays.” *Id.* at § 571.123.S2.

<sup>29</sup> FLA. STAT. ANN. § 316.222 (1999).

<sup>30</sup> FLA. STAT. ANN. § 316.272 (1999).

<sup>31</sup> FLA. STAT. ANN. § 316.294 (1999).

<sup>32</sup> FLA. STAT. ANN. § 316.430 (1999).

<sup>33</sup> 49 C.F.R. § 571.123.S5.2.1.

<sup>34</sup> Federal regulations require on all passenger vehicles, trucks and buses at least two sources of energy capable of returning the throttle to the idle position within a specified time (virtually a blink of an eye). *Id.* at § 571.124.S3, S5. If one source of energy fails to return the throttle to the idle position, the other will take over and safely stop the engine from accelerating out of control, returning the engine to an idle speed. Usually both a spring and a secondary throttle return cable are utilized for the two sources of energy. Although this safety standard does not apply to motorcycles, all major motorcycle manufacturers have incorporated this safety feature into all of their designs. In the custom motorcycle industry this safety feature is often omitted due to the desirability of an internal handlebar throttle cable system. The internal handlebar throttle cable system is typical on custom motorcycles because it helps eliminate all external cables and wires. It is aesthetically pleasing and, in turn, greatly increases the value of a motorcycle. As currently designed, internal handlebar throttle cable systems are incapable of accepting a secondary cable to return the throttle to idle. Therefore only one source of energy, a simple return spring on the carburetor just thousandths of an inch in diameter, is all that prevents the throttle from sticking in the open position. With no handlebar engine kill switch, as required by 49 CFR § 571.123.S5.1, the driver of this motorcycle will not be able to stop in the event of a stuck throttle, and the accelerating engine will place the motorcycle dangerously out of his control.

Unsafe motorcycles not only injure or kill drivers and passengers of motorcycles, they place all who are on or near the roadways in a similarly dangerous position. Approximately three-fourths of all motorcycle accidents involve a collision with another vehicle, usually a passenger automobile.<sup>35</sup> The leading causes for motorcycle accidents are improper lighting and reflex reflectors,<sup>36</sup> and driver error.<sup>37</sup> Poorly designed choppers with extended and lowered frames, and less than acceptable braking and handling capabilities, significantly increase the risk of driver error.<sup>38</sup> In addition, when a motorcycle chassis is extended and lowered beyond industry standards (as in many custom motorcycles), the cornering abilities are severely restricted and this modified design also significantly increases the risk of front end wobble at high speeds. Another inherent design defect that can cause serious injury is the current throttle system installed on many custom motorcycles.<sup>39</sup> A stuck throttle due to faulty design in conjunction with no handle bar kill switch can accelerate an out-of-control 600 pound motorcycle capable of doing great damage.

## V. THE UNDERLYING PROBLEM

Problems arise with enforcing the existing federal and state laws listed above because the builders of the most severely deficient and hazardous motorcycles do not operate under the guise of vehicle manufacturers. Hundreds of small shops around the United States build from 5 to 10 motorcycles per year while misrepresenting themselves as private individuals. Shops like Vicious Cycle buy components and preassembled high performance engines and transmissions, install them in frames that they

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<sup>35</sup> HARRY H. HURT ET AL., NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., *MOTORCYCLE ACCIDENT CAUSE FACTORS AND IDENTIFICATION OF COUNTERMEASURES*, REP. NO. DOT HS 5 01160 (1981), available at [www.salemhog.org](http://www.salemhog.org) (follow "Safety Tips" hyperlink; then follow "The Hurt Study on Motorcycle Accidents" hyperlink).

<sup>36</sup> *Id.* The failure of motorists to detect and recognize motorcycles in traffic is the predominating cause of motorcycle accidents. *Id.*

<sup>37</sup> *Id.*

<sup>38</sup> As early as 1981, the *Hurt Study* recognized that motorcycle modifications such as those associated with custom motorcycles, or choppers, were more likely to be in accidents per capita. See HURT, ET AL., *supra* note 35. All major motorcycle manufacturers utilize both laboratory and road tests on any and all design changes to new or existing models. These tests ensure strict handling performance requirements under normal and severe road conditions in accordance with the horsepower capabilities of their products. Results from these tests are readily available to the public, and often determine the desirability and safety of a motorcycle. In contrast, when custom motorcycle builders design a chopper, performance and handling characteristics are an afterthought at best and are rarely tested before put into production.

<sup>39</sup> See HURT, ET AL., *supra* note 35.

either purchase or build themselves, and then take the components' Manufacture Statements of Origin ("MSO") to the local State Department of Motor Vehicles ("DMV"). The DMV inspects the components for proper origin in order to ascertain that they are not stolen, and then issues titles to the motorcycles as Assembled Parts Vehicles ("ASPT") to the so-called private individuals. The builder then sells the motorcycle to customers like George Newton around the nation and the titles are transferred to them.

The FMVSS regulations and penalties for non-compliance only apply to manufacturers and those offering a vehicle for its first time sale.<sup>40</sup> FMVSS regulations do not apply to private individuals who build a vehicle for their own personal use, title it as such, and then resell it.<sup>41</sup> The ASPT system is therefore an effective way for non-complying motorcycles to bypass FMVSS regulations.

Florida is one of the first states to recognize the ASPT problem and has limited the Assembled Parts Vehicle procedure to two vehicles per year per individual.<sup>42</sup> However, builders in Florida can still produce as many motorcycles as desired by simply titling their products under employees' or friends' names, thus rendering Florida's quantitative restrictions ineffective and difficult to enforce. In addition, most states, including California, are in a worse position because they have no limitations at all on the quantity of motorcycles an individual can build, title, and sell per year.

Even when motorcycles built and sold by the hundreds of small, unregulated shops conform to acceptable performance characteristics, numerous builders lack qualified personnel to assemble the vehicles properly. An example of improper assembly is the loose axle nut scenario given in hypothetical D.<sup>43</sup> Many custom motorcycles are poorly built by inexperienced mechanics, and pose an additional danger to consumer and highway safety.

As mentioned in Section III, the greatest hazards of the custom motorcycle industry do not solely only arise from a lack of equipment features.<sup>44</sup> Hazards also exist because many of the motorcycles' designs are inherently flawed and therefore the vehicles do not handle or respond properly when driven. An example of such a custom motorcycle design

<sup>40</sup> 49 U.S.C. § 30112(a) (2005). A vehicle being offered for its first-time sale is a new vehicle, never previously titled, and manufactured strictly for selling purposes. *Id.* This does not include custom motorcycles which are built by private individuals for their own personal use and subsequently resold.

<sup>41</sup> *Id.* at § 30112(b)(1).

<sup>42</sup> Through information obtained in telephone conversations with George Edwards of the Miami Dade Police Department and Karen Reyes of the Florida Department of Motor Vehicles in February of 2005.

<sup>43</sup> See discussion *supra* Section II.D.

<sup>44</sup> See discussion *supra* Section III.

hazard is the lowered frame and extended front end issue given in hypothetical E.<sup>45</sup> Typical custom motorcycle builders are strictly concerned with beauty, aesthetics, and speed; motorcycle performance and handling are in most cases afterthoughts at best and sometimes even non-existent. The most valuable and sought after custom motorcycles are the ones that break through existing boundaries and have never been built or seen before. However, the reason these radical motorcycles have never been available to the public or seen before is that major manufacturers have deemed the designs unsafe.<sup>46</sup> All of the major motorcycle manufacturers have research and development programs that build prototype and concept vehicles that break through the boundaries of existing technology and aesthetics. Although the vehicles are beautiful in form, the designs place the public at unreasonable risk of injury and product liability laws ensure the major manufacturers merely use the programs to enhance existing or proposed designs. In contrast, because small, independent custom motorcycle builders can often escape product liability, their designs are often outrageous and display a flagrant disregard for public and user safety. The following section explains how the hundreds of small, independent custom motorcycle builders can escape product liability and place radical motorcycles in the stream of commerce without repercussion.

## VI. THE INEFFECTIVENESS OF PRODUCT LIABILITY CLAIMS AGAINST CUSTOM MOTORCYCLE BUILDERS.

Manufacturing defects are imperfections that occur when a specific product deviates from the manufacturer's intended design. For example, one might regrettably discover a decomposed mouse in a bottle of soda,<sup>47</sup> or a blade of an electric saw might shatter because the metals in the blade are not fully bonded together.<sup>48</sup> Manufacturers are held to a strict liability standard when death or injury is caused as a result of a manufacturing defect.<sup>49</sup>

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<sup>45</sup> See discussion *supra* Section II.E.

<sup>46</sup> The major motorcycle manufacturers addressed in this article are: Honda, Harley Davidson, Kawasaki, Suzuki, Yamaha, BMW, and Moto Guzzi.

<sup>47</sup> See *Shoshone Coca-Cola Bottling Co. v. Dolinski*, 420 P.2d 855 (Nev. 1966).

<sup>48</sup> See DAN B. DOBBS, *THE LAW OF TORTS* (Hornbook Series, 2000) (citing *Van Deusen v. Norton Co.*, 612 N.Y.S.2d 464 (1994)).

<sup>49</sup> In *Rix v. General Motors Corp.*, 723 P.2d 195 (Mont. 1986), the court held that for a manufacturer to be strictly liable for an injury caused by their product's defect, the product must: 1) be defective at the time it was sold, 2) have reached the consumer without substantial change to its design, 3) have been used by the consumer in a way that it was intended to be used, and 4) the consumer must not have known of the defect at the time of injury.

However, because custom motorcycle builders actually intend the omitted safety equipment and inadequate designs of their products, and it is the intended omissions and designs that create unreasonable risk of injury, defects associated with custom motorcycles will generally fall within the category of design defects.<sup>50</sup> A design defect occurs when the intended design of a product is inadequate and needlessly dangerous.<sup>51</sup> Examples of defectively designed products are: asbestos insulation,<sup>52</sup> “an off-road vehicle with a roll bar that doesn’t protect against end-over-end rolls,”<sup>53</sup> or “an electric pot that cooks liquid hot enough to destroy a child’s skin for life but isn’t equipped with a lockable lid. . . .”<sup>54</sup> A higher threshold of fault is required in design defect cases since a finding of guilt is a determination that the entire product line is defective. Once a design defect is established, strict liability applies even if the manufacturer has exercised all possible care in the preparation of their product.<sup>55</sup> Any person who is injured as a result of a design defect is entitled to recover from the manufacturer;<sup>56</sup> this includes everyone injured as a result of Vicious Cycle’s custom motorcycle in the Section II hypotheticals.<sup>57</sup>

However, George Newton and the others injured cannot establish that the custom motorcycle was defectively designed by merely showing that the motorcycle was involved in an accident that resulted in injury.<sup>58</sup> They must use one of two methods that are generally available to prove that the custom motorcycle was legally defective. The most common approach is to show that the risks inherent in the design of the motorcycle outweighed the utility

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<sup>50</sup> See generally JERRY J. PHILLIPS, *PRODUCTS LIABILITY IN A NUTSHELL* 193-97 (6th ed. 2003) (explaining that a design defect is an imperfection that results when the foreseeable risks of harm posed by a product could have been reduced by using a reasonable alternative design).

<sup>51</sup> DOBBS, *supra* note 49, at 980.

<sup>52</sup> *C.f.*, Brochu v. Ortho Pharm. Corp., 642 F.2d 652 (1st Cir. 1981) (holding manufacturer of birth control products without sufficient warning labels liable for woman’s bodily injury as a result of consuming the product).

<sup>53</sup> DOBBS, *supra* note 49, at 980 (citing Leichtamer v. American Motors Corp., 424 N.E. 2d 568, 67 Ohio St. 2d 456 (1981)).

<sup>54</sup> *Id.* (citing Moulton v. Rival Co., 116 F.3d 33 (1st Cir. 1997)).

<sup>55</sup> RESTATEMENT (SECOND) OF TORTS § 402A (1965); see also *Madonna v. Harley Davidson, Inc.*, 708 A.2d 507 (Pa. Super. Ct. 1997).

<sup>56</sup> Donald M. Zupanec, Annotation, *Cause of Action in Strict Tort Liability for Injury Caused by Defective Motorcycle*, 20 COA 711 § 9 (1989); RESTATEMENT (SECOND) OF TORTS § 402A (1965) (the seller must be engaged in the business of selling such a product, and the product must have reached the consumer without substantial change in the condition as sold).

<sup>57</sup> See discussion *supra* Section II.A-E.

<sup>58</sup> Zupanec, *supra* note 57, § 9.

of the motorcycle as designed.<sup>59</sup> This is known as a risk-utility test. The majority of courts apply some form of risk-utility analysis to determine whether a manufacturer's conduct was negligent in design defect cases.<sup>60</sup> The alternative and less frequently used approach is to show that due to its design, the custom motorcycle was more dangerous than, or failed to perform as safely as, an ordinary consumer would expect.<sup>61</sup> This second method is known as a consumer expectation test.<sup>62</sup>

In addition, because in hypotheticals A, B and C George Newton's injuries occurred as a result of omitted safety equipment, and the omitted safety equipment was required by Federal and State statutes, Vicious Cycle's custom motorcycle design can be deemed as defective *per se*.<sup>63</sup> To establish defectiveness *per se* in this context, the plaintiffs must prove that the statute was designed to prevent the injuries that resulted and that they are in the class of people the statute is designed to protect.<sup>64</sup>

Even if we expand a hypothetical to portray that George's motorcycle accident was due to a faulty part that Vicious Cycle purchased from another company, Vicious Cycle is still liable because a manufacturer has a duty to inspect their final products and ascertain that they are free of defects.<sup>65</sup> It would seem that George and everyone injured as a result of the defectively designed custom motorcycle have strong cases against Vicious Cycle, and collecting a monetary award for their injuries will be relatively straight-

<sup>59</sup> *Id.* Where the risk-utility approach is taken, the plaintiff has the burden to prove the likelihood of injury due to design of the motorcycle, the probable seriousness of the injury, the manufacturer's knowledge of the risks associated with the design, and the feasibility of a safer design. *Id.*

<sup>60</sup> DOBBS, *supra* note 49, at 340. Factors relevant to a risk-utility analysis are: (1) The gravity of the danger posed by the challenged product; (2) the likelihood that the product will cause injury; (3) the availability of a safer substitute design; (4) the manufacturers ability to eliminate the unsafe character of the product; (5) the monetary costs associated with a safer design; (6) the user's ability to avoid the danger by exercising reasonable care; (7) the user's awareness of the inherent dangers of the product; and (8) the usefulness and desirability of the product. *O'Brien v. Muskin Corp.*, 463 A.2d 298, 304-05 (N.J. 1983). The ultimate burden is on the plaintiff to establish a *prima facie* case of defect with reference to the above-stated factors. *Id.* at 306.

<sup>61</sup> Zupanec, *supra* note 57, § 5.

<sup>62</sup> PHILLIPS, *supra* note 51, at 11-13. Proving defective design through use of a consumer expectation test analyzes whether the product sold is dangerous to an extent beyond that which could be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics. For example, the average consumer can easily determine that ground glass in food does not meet ordinary expectations. *Id.*

<sup>63</sup> *Elder v. Allstate Ins. Co.*, 341 F. Supp. 2d 1095, 1099 (D. Minn. 2004) (citing *Osborne v. McMasters*, 40 Minn. 103, 41 N.W. 543, 543-44 (1889)).

<sup>64</sup> *Id.* at 1100.

<sup>65</sup> *MacPherson v. Buick Motor Co.*, 217 N.Y. 382, 111 N.E. 1050 (1916) (Buick Motor Co. held negligent in products liability case when an automobile accident occurred due to a faulty wheel assembly Buick purchased from supplier).



forward, but many hurdles will arise during litigation, some insurmountable. Regardless of the method or methods used to prove the custom motorcycle's defective design, in order to be compensated for their injuries, the parties must still establish that the defective design or omitted safety features are what caused their injuries.<sup>66</sup> In hypotheticals A, B and C, the omitted safety equipment scenarios, Vicious Cycle has several valid defenses to causation. The manufacturer of the custom motorcycle will contend that the injuries were solely caused by either (1) the carelessness or negligence of the driver of the car that crashed broadside into George; (2) the truck that rear-ended him; or (3) George himself for failing to exercise reasonable care when changing lanes on the interstate.<sup>67</sup> If these extrinsic factors played strong enough roles to be deemed the proximate causes of the injuries, they become intervening causes that will supersede Vicious Cycle's negligence and no liability will attach to the manufacturer.<sup>68</sup> Vicious Cycle must prove that the extrinsic factors were the sole causes of the injuries because the contributory negligence of others is generally not recognized as a defense in strict liability torts.<sup>69</sup>

In hypothetical D, where a loose axle nut caused the rear brakes to lock up, slamming George to the asphalt at 65 M.P.H., George's estate must prove that the loose axle nut caused the accident and not vice-versa.<sup>70</sup> Motorcycle accidents can be violent and often destructive to the evidence of causation, making it difficult for plaintiffs to prove the initial cause of their accident. George died as a result of the accident in hypothetical D, and his estate might not think to look at the possibilities of an improperly assembled motorcycle. If the claim is not pursued, Vicious Cycle will never know of their mechanic's error, and as a result, fail to institute a quality control program to check past and future assemblies; thus, the problem could happen again. Even if George's estate pursues this claim, George is dead and his unavailability as a witness will further complicate litigation.

In hypothetical E, the lowered chassis and restricted turning radius scenario, George's possible negligence will once again play a determinative role in the outcome of causation. Vehicle speed will play a factor and Vicious Cycle will present expert witness testimony to claim that only if George was

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<sup>66</sup> Zupanec, *supra* note 57, § 5; *see also* Calhoun v. Honda Motor Co., 738 F.2d 126 (6th Cir Ky. 1984); Evangeline v. Billings Cycle Ctr., 626 P.2d 841 (Mont. 1981).

<sup>67</sup> *See, e.g.*, McInnes v. Yamaha Motor Corp, 673 S.W.2d 185, 186 (Tex. 1984); Ponte v. Harley Davidson Motor Co., 732 S.W.2d 561 (Mo. App. 1987).

<sup>68</sup> *See* EDWARD J. KIONKA, TORTS IN A NUTSHELL 85-89 (2d ed. 1992).

<sup>69</sup> *See id.* at 44.

<sup>70</sup> *See* Peterman v. Indian Motorcycle Co., 216 F.2d 289 (Mass. 1954) (stating that an injured motorcyclist cannot recover due to lack of proof as to whether the broken part caused the accident or vice-versa).

exceeding the speed limit or misusing the motorcycle on the banked curve could such a result occur. Misuse may break the causal connection between the defective condition of the motorcycle and George's injuries.<sup>71</sup> However, George may assert that even if he was misusing the motorcycle, it was reasonably foreseeable that the motorcycle would be used in the manner that it was, and Vicious Cycle is liable for the reasonably foreseeable abnormal uses of their products.<sup>72</sup>

In addition, depending on the jurisdiction in which the action is brought, if the lowered chassis and restricted turning radius defects in hypothetical E were open and obvious, and George knowingly and willfully drove the custom motorcycle anyway, he will have assumed the risk of injury and there may be no liability for Vicious Cycle.<sup>73</sup> For George to effectively pursue damages in this claim he must establish that he did not know of the defective conditions, and that they were not open and obvious.<sup>74</sup> However, there is nothing obscure about the extremely lowered frame height and extended front end of a radical chopper.

An experienced motorcycle rider can appreciate the intricacies associated with driving a radical custom motorcycle, or chopper. It often requires advanced thought and a delicate touch when driving in either traffic or on an open stretch of road because of the unique and often restrictive handling characteristics, especially when there is a second rider on board. Additionally, many custom motorcycles have no kill switch (a device which instantly shuts down the running engine), turn signals, horn, speedometer, reflectors or proper lighting to warn others and evade potential accidents. An experienced rider can usually compensate for a chopper's deficiencies and drive the bike accordingly. However, prospective and actual custom motorcycle buyers like George Newton have never owned a large street motorcycle before. For these first time chopper owners, additional concerns arise because they are inexperienced and unaware of the potential hazards and intricacies associated with the custom motorcycle. People like George purchase a chopper based on the looks of the bike. To compound the

<sup>71</sup> See *Bernotas v. Harley Davidson, Inc.*, 543 F. Supp. 519, 521 (W.D. Pa. 1982).

<sup>72</sup> See *Ford Motor Co. v. Matthews*, 291 So.2d 169, 174 (Miss. 1974).

<sup>73</sup> See RESTATEMENT 2ND OF TORTS § 402A (1965) (assumption of risk is permitted as a contributory negligence defense in strict liability tort); see also *Zupanec, supra* note 57, § 8 (citing *Shaffer v. AMF Inc.*, 842 F.2d 893 (Ohio 6th Cir.1988)); *Miller v. Todd*, 518 N.E.2d 1124 (Ind. Ct. App 1988) (failure to equip motorcycle with crash bars was an open and obvious danger to preclude recovery under strict liability).

<sup>74</sup> See *Zupanec, supra* note 57, § 8 (citing *Barnes v. Harley Davidson Motor Co.*, 357 S.E.2d 127 (1987) and *Ensor v. Hodgeson*, 615 S.W.2d 519 (Mo. Ct. App. 1981) (where plaintiffs unreasonably encountered a known danger associated with their motorcycles, they had assumed the risk of injury)). See also RESTATEMENT OF TORTS § 402A (1965) (assumption of risk).

concerns associated with inexperienced motorcyclists further, a motorcycle manufacturer has no legal duty to warn buyers of the dangers associated with their product, especially open and obvious dangers.<sup>75</sup> That which is "open and obvious" to an experienced rider can go unnoticed by the novice; consequently, unsuspecting first time motorcyclists purchase custom motorcycles at additional risk of injury. Presumably, even if Vicious Cycle had a legal duty to warn George of potential hazards because of the radical nature of the motorcycle, they still would have built the chopper and someone still would have bought, registered, and driven it. There is no guarantee that the accidents in the hypotheticals would not have happened anyway. Warnings are simply not enough.

Manufacturers of defective custom motorcycles are subject to strict liability for injuries caused by their product only if the motorcycle is in substantially the same condition as when it was sold.<sup>76</sup> However, custom motorcycles require constant additional maintenance after initial purchase; they are mechanically problematic on a consistent basis due to their unique designs, small production numbers, and lack of product testing. This subsequent maintenance is usually not performed by the original manufacturer, and could therefore preclude recovery in product liability from Vicious Cycle because the motorcycles will not be in their original, as-purchased condition.<sup>77</sup> Some repairs can be accomplished without any deviation from the original builder's design. However, many repairs require moderate to major alterations due to unforeseen consequences during the design and building stages. Necessary alterations made by repair shops other than the manufacturer can provide a valid defense in a custom motorcycle product liability claim and again preclude recovery for injuries sustained from a manufacturer's defective design.<sup>78</sup>

When a product is not fit for the ordinary purpose for which it was intended, and as a result causes injury to a consumer, an action can be

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<sup>75</sup> See *Byrnes v. Honda Motor Co., Ltd.*, 887 F. Supp. 279, 280-81 (Fla. Ct. App. 1994) (holding that a motorcycle is not an inherently dangerous product therefore manufacturer has no duty to warn of dangers associated with the vehicle). It is the author's opinion, however, that a chopper is not an ordinary motorcycle and may not fall within the same category. The exponential growth of the radical custom motorcycle craze is relatively new, and it is possible that future case law may re-categorize certain choppers as inherently dangerous.

<sup>76</sup> RESTATEMENT OF TORTS § 402A; see also *Zupanec*, *supra* note 57, § 8.

<sup>77</sup> See *Landry v. E.A. Caldwell, Inc.*, 280 So.2d 231 (La. Ct. App. 1973) (injured motorcyclist precluded from recovery in a products liability case because he adjusted the clutch prior to the accident).

<sup>78</sup> *Id.*

maintained against the manufacturer for breach of warranty as well.<sup>79</sup> However, in the custom motorcycle industry, new defenses to this cause of action have arisen where plaintiffs were unable to prove that the builders were actually engaged in the business of selling motorcycles.<sup>80</sup> To effectuate a successful breach of warranty claim, a plaintiff must prove that the custom motorcycle builder was in fact a manufacturer within the meaning of the Product Liability Claim Act of that particular state, and not merely an occasional seller or motorcycle enthusiast building custom motorcycles as a hobby.<sup>81</sup> Because many custom motorcycle builders operate by misrepresenting themselves as private individuals selling personal motorcycles, these disguised sellers can escape the breach of warranty liabilities of those officially engaged in the business of manufacturing custom motorcycles.<sup>82</sup> Proving that a custom motorcycle builder is a manufacturer “engaged in the business” of creating motorcycles is an additional obstacle for those injured by defective products.

When a manufacturing or design defect is established, and the defect is proven to have caused the injuries, plaintiffs or their estates can rightfully recover substantial monetary awards to compensate for their death or injury.<sup>83</sup> However, hundreds of independent custom motorcycle builders lack any insurance against such claims and usually operate on a shoe-string budget with few personal assets. As a result, numerous builders are virtually judgment proof, leaving plaintiffs like George Newton uncompensated for their injuries. The builders will either close down shop and possibly reopen under another name and ownership, or leave the profession altogether after a finding of negligence. These same custom motorcycle builders hardly have the assets to start building a bike unless a customer pays money up front; therefore, attempting to collect a reasonable monetary award for death or serious injury due to a faulty custom motorcycle is futile.

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<sup>79</sup> See KIONKA, *supra* note 69, at 219-25; see also *Baxter v. Ford Motor Co.*, 168 Wash. 456 (Wash. 1932).

<sup>80</sup> RESTATEMENT (SECOND) OF TORTS § 402A (1965); see also *Sheppard v. Sundance Components, Inc.*, No.83577, 2004 WL 1402683 at \*3-4 (Ohio 8th Ct. App. 2004) (holding that a custom motorcycle builder successfully avoided breach of warranty liability to the injured purchaser of their custom motorcycle because the court deemed the builder to be merely a hobbyist and only an occasional seller of custom motorcycles, but not a manufacturer).

<sup>81</sup> *Sheppard*, No.83577, 2004 WL 1402683 at \*3-4.

<sup>82</sup> See *id.*

<sup>83</sup> See *Aston v. Yamaha Motor Corp.*, 28 ATLA L. Rep. 476 (1985) (\$1,652,000 jury verdict reduced by 10% for comparative negligence, plus \$100,000 in punitive damages, for a 17 year old male suffering amputation of leg below the knee).

Other than specific requirements for safety equipment and braking, there are no laws regulating the performance and handling of a motorcycle.<sup>84</sup> However, major motorcycle manufacturers have readily accessible assets that the courts will siphon if their products have defects that cause unreasonable injuries; therefore, product liability laws effectively ensure that the major manufacturers produce reasonably safe products. In contrast, hundreds of small, independent custom motorcycle builders have no assets. Nothing regulates their radical designs because product liability laws are ineffective against them. Although beautiful in form, many choppers lack minimum safety equipment and do not handle or perform adequately, placing the public at unreasonable risk of injury.

Under the crashworthiness doctrine, a vehicle manufacturer's duty of reasonable care in the design and manufacture of a vehicle must take into consideration the foreseeable injury-producing effects of an impact,<sup>85</sup> and this doctrine applies to motorcycles as well.<sup>86</sup> Because product liability laws are such an effective deterrent, major manufacturers conduct extensive crash testing to ensure minimal injury in the event of an accident. Through research, the major manufacturers design their products to fairly meet any emergency that could reasonably be anticipated. An example of a foreseeable post-impact emergency is given in hypothetical A, where George Newton sustained further injuries because he was unable to turn off the engine as the spinning rear wheel removed pieces of his leg. Because of the ineffectiveness of product liability in the custom motorcycle industry, crash testing research and subsequent remedial design is non-existent. Riders and passengers on custom motorcycles are therefore subject to greater risk of serious injury or death due to an impact, and usually are without an avenue for recourse because of the judgment proof status of the builders.

As stated in Section IV, three fourths of all motorcycle accidents involve a collision with another vehicle,<sup>87</sup> and the predominant cause of all motorcycle accidents is the failure of a second vehicle to detect and recognize a motorcycle in traffic.<sup>88</sup> In most of these accidents it is the actions of the driver of the motorcycle and secondary vehicle which are determinative of causation. However, operator error often overlooks the possibility that if the motorcycle was properly designed it may have had the braking, handling, turning radius or lighting capabilities requisite to avoid an accident in the

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<sup>84</sup> See discussion *supra* Section IV.

<sup>85</sup> Nicolodi v. Harley Davidson Motor Company, Inc., 370 So.2d 68, 70-71 (Fla. Dist. Ct. App. 1979); see also PHILLIPS, *supra* note 51, at 207-09.

<sup>86</sup> See PHILLIPS, *supra* note 51, at 207-09.

<sup>87</sup> HURT ET AL., *supra* note 36.

<sup>88</sup> *Id.*

first place. Major motorcycle manufacturers take accident prevention into account by following enumerated safety equipment standards, and employing performance-enhancing tests on proposed designs. Product liability ensures that proper testing is done and therefore eliminates the variables that cause accidents. This allows for interested parties to determine the true cause of an accident and to place blame where it rightfully belongs. In contrast, custom motorcycles are more likely to be involved in accidents because of their safety equipment and design deficiencies,<sup>89</sup> and blame is more likely to be shifted upon the wrong parties. This misplaced culpability creates an unnecessary burden on the wrong insurance companies and creates mental anguish for wrongfully accused automobile drivers.

In the interest of public safety, custom motorcycles should be held to a higher standard of care equal to that of major manufacturers when designing and building motorcycles. A higher standard of care during the custom motorcycle manufacturing process will curtail judgment proof litigation and reduce misplaced culpability by preventing injuries at the onset. The following sections propose methods of guaranteeing this higher standard of care without substantial hardship on the custom motorcycle industry.

#### **VII. ONE SOLUTION AND ITS FLAW: A REGULATORY SYSTEM THAT DELAYS OWNERSHIP TRANSFERABILITY OF A NEWLY PRODUCED CUSTOM MOTORCYCLE.**

The hundreds of small, independent motorcycle shops are by far the largest source of inherently dangerous motorcycles. These rogue shops build, title, and place the highest quantity of hazardous bikes into the stream of commerce, and all under the guise of private sellers. Restricting them and making them conform to safety and performance requirements would be the single most effective way of ensuring public safety. One solution to restrict these hundreds of rogue shops is to create a statute that makes the titles to assembled parts motorcycles nontransferable for 5 years from the date of issuance. The proposed system of delayed title transferability can create a disincentive to build motorcycles for resale that are outside the boundaries of legal conformity. If motorcycle shops that build and title unsafe vehicles under the ASPT system are not permitted to sell their products for 5 years from date of title issuance, there is a likelihood they will not build them, and customers would be extremely hesitant to spend \$25,000 to \$100,000 for a vehicle that cannot be titled.

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<sup>89</sup> See *id.*

This remedy would have no effect on qualified motorcycle manufacturers who correctly build and title their products under their company name. The FMVSS and penalties for non-compliance would still apply to legal manufacturers and would still create the existing effective disincentives. Nor would the statute affect an individual who chooses to build his own custom motorcycle for private usage. To prevent undue hardship in certain cases, a subsection in the statute can provide an exemption to the proposed Delayed Title Transferability Statute (DTTS). The exemption could be granted if and when an ASPT motorcycle is inspected for newly enumerated performance features and existing state and federal safety and equipment requirements. Inspections can be done by whomever the National Highway Transportation Safety Administration trains and delegates such authority to. For example, the Office of Vehicle Safety Compliance, an existing agency of NHTSA, could train qualified major motorcycle dealerships or motorcycle driving schools to properly conduct the inspections. The dealerships and driving schools could charge a set fee payable by the exemption applicant to make it worth their while.

Newly enumerated motorcycle performance features required for an exemption under the proposed DTTS should test for proper turning radius, cornering ability, handling ability, braking capabilities as specified in 49 C.F.R. Section 571.122, and overall rider comfort throughout these maneuvers.<sup>90</sup> The performance testing could be accomplished through the use of a traffic cone arrangement in a parking lot. Frequent emissions and noise level violations could be curtailed through this process as well. The hundreds of rogue custom motorcycle builders would be forced to adhere to legal manufacturer standards if they wish to remain in business.

As reflected in the title of this section there is an inherent flaw within this proposed simple solution; custom motorcycle builders could simply put off titling the motorcycle until after its sale to the purchaser. Once purchased, the builder could arrange with the customer to assist in titling the vehicle in the customer's name. This proposed statute would therefore only affect the selling capabilities of the new owner of the motorcycle and would be much less of a deterrent to the intended builders. Whether or not a consumer would be deterred from purchasing a motorcycle that they must keep for 5 years due to title transferability issues would probably not have a very significant impact on the compliance of the custom motorcycle industry.

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<sup>90</sup> Optimum ergonomics and increased comfort level can greatly reduce the risk of driver fatigue, distraction and accidents.

### VIII. ANOTHER SOLUTION AND ITS FLAW: NHTSA INSPECTION OF CUSTOM MOTORCYCLES VIA PHOTOGRAPHS.

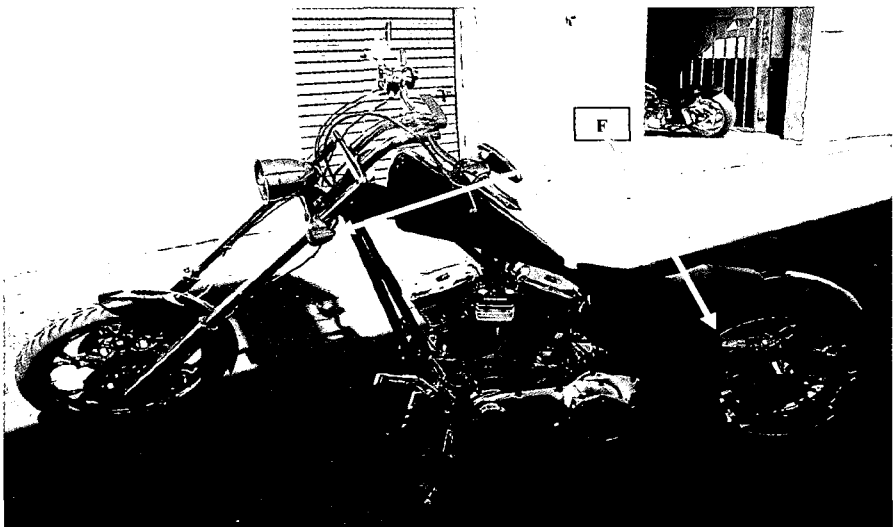
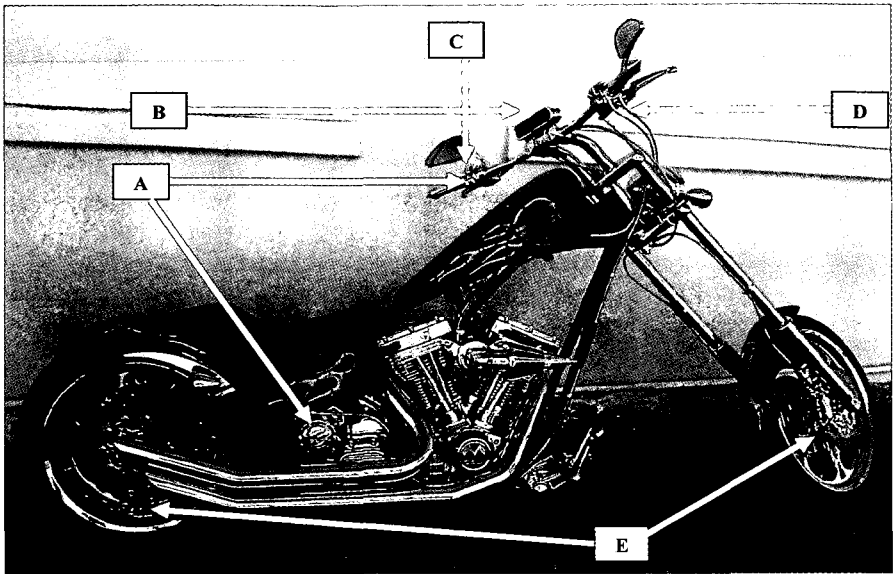
Of course, the ultimate solution would hold custom motorcycle builders to the same high standards as the major manufacturers during the building process. This would ensure that only qualified designs, vehicle safety equipment, personnel, and practices are used in the manufacturing and design stages. However, the majority of the hundreds of small, rogue shops constantly go in and out of business, and with new shops sprouting up on a weekly basis, keeping track of who is building what would be an exercise in futility. Only when a custom motorcycle buyer or builder applies for the initial title does the need for regulation become apparent. To effectively ensure the safety of custom motorcycles, the regulation will therefore have to be done at the initial titling stage.

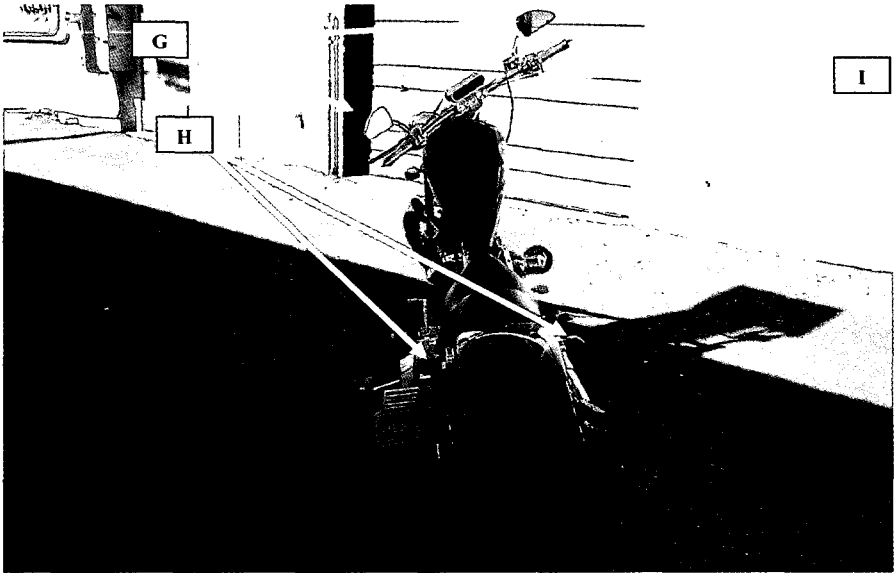
Shown previously in this article was a photograph of a typical non-conforming custom motorcycle with both state and federal equipment violations readily apparent to a trained eye.<sup>91</sup> To regulate and reduce the number of motorcycles such as the one previously depicted, states can require, during the initial titling of the vehicle, a proposed Certificate of Safety Equipment Conformity ("CSEC") issued federally through the existing National Highway Traffic Safety Administration ("NHTSA"). Through this proposed system, people aspiring to title their newly built custom motorcycles must send three pictures of their motorcycle; one rear, and one profile of each side to the NHTSA. The NHTSA would then inspect the photographs for conformity with all state and federal minimum safety equipment standards and issue a CSEC. The aspiring titleholder would then present the issued CSEC to a title agency in their state and complete the titling process. To prevent fraud, certified copies of the pictures sent to the NHTSA would be returned with the issued CSEC and presented to the title agency as well. This would prevent people from sending in pictures of a motorcycle other than the one intended or significantly altering the vehicle prior to titling. Below is an example of the required three photographs of a fully compliant custom motorcycle as per this proposal.

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<sup>91</sup> See photo *supra* Section IV.







Notice that all enumerated safety equipment requirements, both state and federal, are clearly visible in the photographs: handle bar engine kill switch (I), turn signals (F), rear view mirrors (G), speedometer/odometer (B), horn (A), two taillights mounted symmetrically about the vertical centerline and above 15 inches from the ground (H), front and rear brakes (E), multiple beam headlight (C), and handle bars that do not rise higher than 15 inches from the lowest part of the seat. The only equipment missing on the custom motorcycle in the photograph, as can clearly be seen by an experienced and trained eye, is reflex reflectors.<sup>92</sup> Also, notice the much safer dual external throttle cables (D) exiting the right side handle-bar assembly.<sup>93</sup>

There are both advantages and disadvantages of using the proposed photograph method to stem the tide of illegally unsafe motorcycles: a major advantage of this system is the uniformity of safety equipment standards in all states. Since motorcycles are inherently mobile and are often driven across state lines, it only makes sense to ensure that a custom motorcycle conforms to the safety equipment requirements of all 50 states in addition to the federal FMVSS upon its initial sale to the public. Major manufacturers already comply with the safety equipment requirements of all 50 states and

<sup>92</sup> There are no mufflers, but, as mentioned earlier, this article will not address vehicle identification numbers or noise and pollution control because they do not affect the safety of custom motorcycles.

<sup>93</sup> See HURT, ET AL., *supra* note 35.

this proposal would hold the custom motorcycle industry to that same high standard. Another advantage to a federally enacted version of the photograph system is cost and ease of implementation. The NHTSA already exists, and to merely add an additional office at their headquarters in Washington would involve minimal expenditure and burden.

As stated in the heading to this section, there is a flaw within this federal proposal because there are no assurances that the safety equipment depicted in the photographs actually function properly or even work at all. The NHTSA photograph method would also fail to address assembly and design problems associated with overzealous and inexperienced custom motorcycle builders. To correct these inadequacies, the motorcycle would have to be brought to the individual state's Department of Motor Vehicles and a subsequent physical inspection and approval performed prior to initial issuance of a title. There is no need for dual federal and state oversight of custom motorcycles.

#### **IX. THE MOST EFFECTIVE SOLUTION: MOTORCYCLE INSPECTION PRIOR TO ISSUANCE OF INITIAL TITLE.**

The most cost efficient and effective method to curb the influx of unsafe custom motorcycles is to require a one-time physical inspection of the vehicle during the initial titling process. This one time inspection could mirror the successful annual motor vehicle inspections required by the State of New York. New York currently implements a thorough yearly and change of registrant safety inspection of all non-exempt registered motor vehicles (motorcycles included) designed to eliminate the dangers of unsafe vehicles on New York's roadways.<sup>94</sup> The following paragraph provides a brief synopsis of New York's current annual motorcycle inspection program and the recommended proposal for a one-time, pre-title inspection to remedy the safety problems associated within the custom motorcycle industry.

The State of New York certifies registered and qualified motorcycle repair shops to conduct and charge a fee for annual motorcycle performance and safety equipment inspections according to enumerated guidelines.<sup>95</sup> Passing vehicles are issued yearly inspection stickers and the owner of a vehicle found driving on the road without a current sticker is issued a fine.

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<sup>94</sup> N.Y. TRANS. LAW §§ 15-79.2, 79.28, 79.3 (2005). This article is not advocating annual motor vehicle inspections. The purpose of this article is to ensure that the initial build, design and assembly of custom motorcycles are acceptable within the current state and federal safety standards and that the motorcycles handle and respond properly when driven.

<sup>95</sup> N.Y. TRANS. LAW § 15-79.17 (2005).

For a motorcycle repair shop to qualify for a certified motor vehicle inspector's certificate, at least one person employed must have a minimum of one year motorcycle maintenance experience or at least one year towards an AAS degree in automotive technology, and have successfully completed the inspector certification training program.<sup>96</sup> The New York inspections are quite thorough. They include a road test of the motorcycle to check for proper braking (the motorcycle must stop within 25 feet when brakes are applied at 20 mph); in-shop inspections covering adequate brake rotors, pads, lines and hoses; loose, broken or out of adjustment steering head and wheel bearings; bent, broken or cracked handlebars, frame and suspension components; approved and securely mounted lighting and turn signals; proper rear view mirror; acceptable hydraulic brake peddle drop; loose hardware and overall roadworthiness.<sup>97</sup>

Maryland requires a similar inspection of all non-exempt motor vehicles, including motorcycles, but only applies the inspection procedure upon sale or transfer of title of a used vehicle or when a motorcycle is newly constructed or reconstructed by a person other than a licensed manufacturer.<sup>98</sup> Included in the physical inspection is the requirement that the vehicle meets or exceeds all applicable federal and state safety standards.<sup>99</sup> The Maryland or New York inspection procedures, if enacted in all 50 states and applied to newly constructed or reconstructed motorcycles by persons other than licensed manufacturers, would remedy the current hazards associated with the rapidly expanding custom motorcycle industry. Certified motorcycle inspection shops would do the inspections, issue a Certified Safety Equipment Compliance certificate ("CSEC") to passing vehicles, and the owner or builder would then take the required CSEC to the titling agency upon application for initial title. If a vehicle fails to pass inspection, the certified motorcycle inspection shop would tell the applicant of the motorcycle's deficiencies and how to correct them. Upon correction of all deficiencies, the applicant would then have the opportunity for re-inspection, perhaps at a reduced rate, and subsequent motorcycle certification. Other than the need for additional cornering ability and road handling tests there are no apparent flaws within this proposed system, and these additional

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<sup>96</sup> *Id.*

<sup>97</sup> N.Y. TRANS. LAW § 15-79.28.

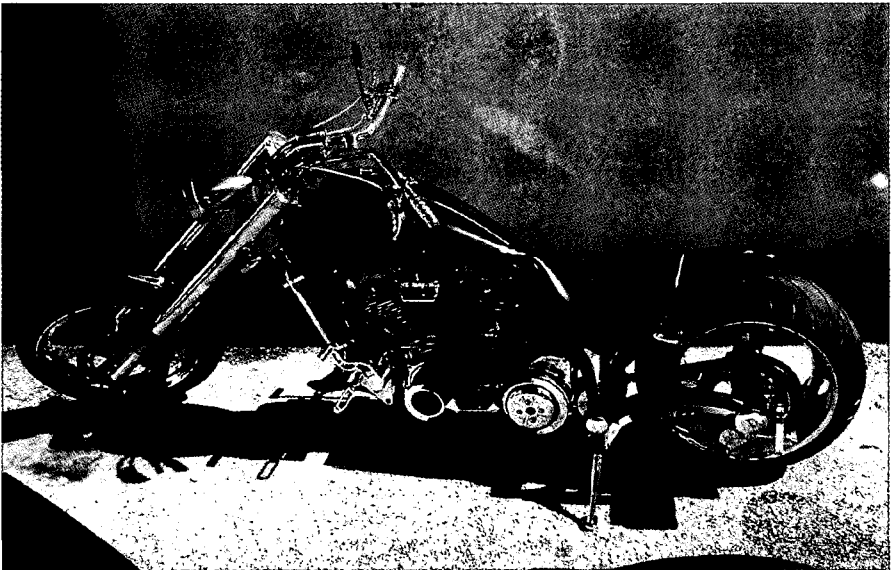
<sup>98</sup> COMAR § 11.14.03.01 (2005) (applying inspection procedures and requirements to motorcycles). For specific inspection requirements, *see id.* at §§ 11.14.03.02 – 11.14.03.14; *see also id.* at § 11.14.01.14 (inspection required when used vehicle is sold or ownership is transferred or when used vehicle is titled and registered in the State).

<sup>99</sup> *Id.* at § 11.14.03.01.

performance tests can easily be included with the use of a traffic cone arrangement in a parking lot.

The custom motorcycle industry is an excellent avenue for small businesses to thrive through creativity; it employs thousands of entrepreneurs, mechanics, painters, machinists, artists, and dreamers, and serves the needs of a rapidly expanding consumer base. Nothing should be done that would negatively affect the industry's growth, and no further regulations are needed other than the assurance of product safety, and as a result, public safety. The preferred proposal stated above would ensure the public of that needed safety and actually help the expansion of the custom motorcycle industry by allowing it to grow safely within acceptable standards.

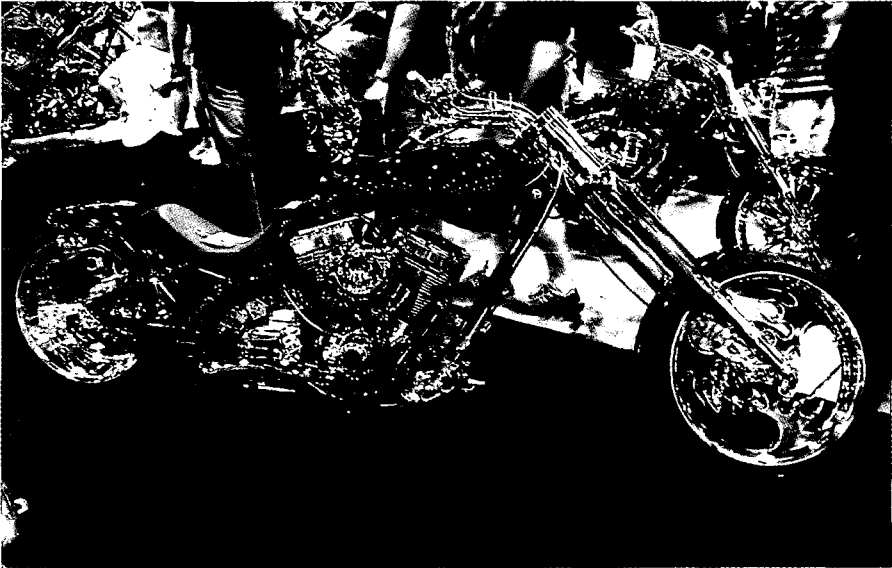
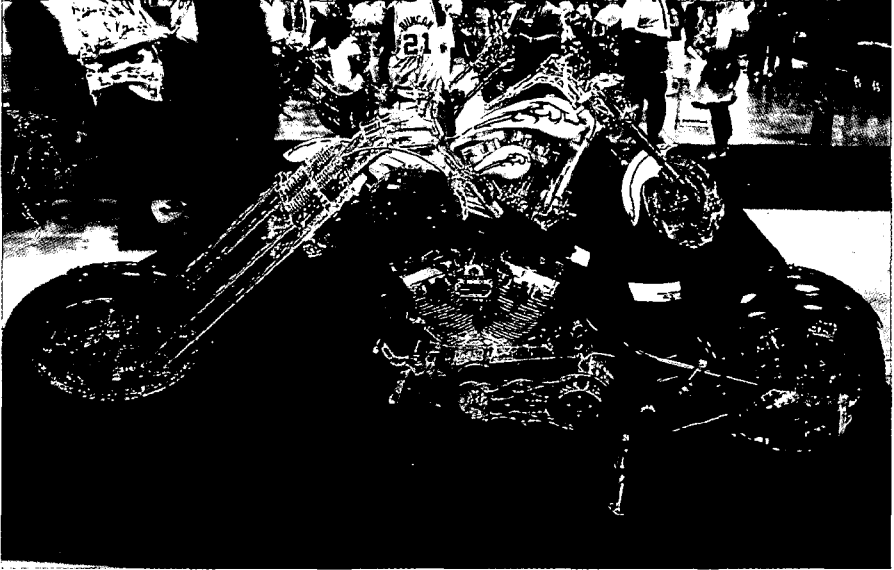
The preferred proposal would not place undue hardship on the vibrant custom motorcycle industry by creating a financial burden or by stifling artistic creativity either. The following several pages contain seven photographs of custom motorcycles built by the relatively few large manufacturers with assets large enough to be affected by product liability.<sup>100</sup> These motorcycles therefore comply with all federal and state regulations (except noise and pollution). The motorcycles cost no more to build than their non-complying counterparts, and are equally commercially viable. The motorcycles are beautiful yet safe, and are bursting with artistic, mechanical, and engineering creativity. They also come in many designs.

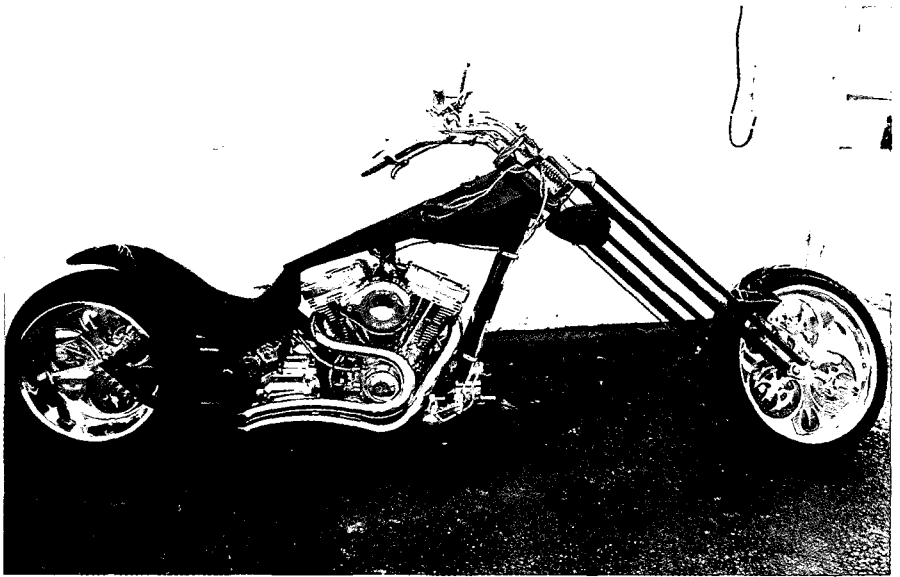


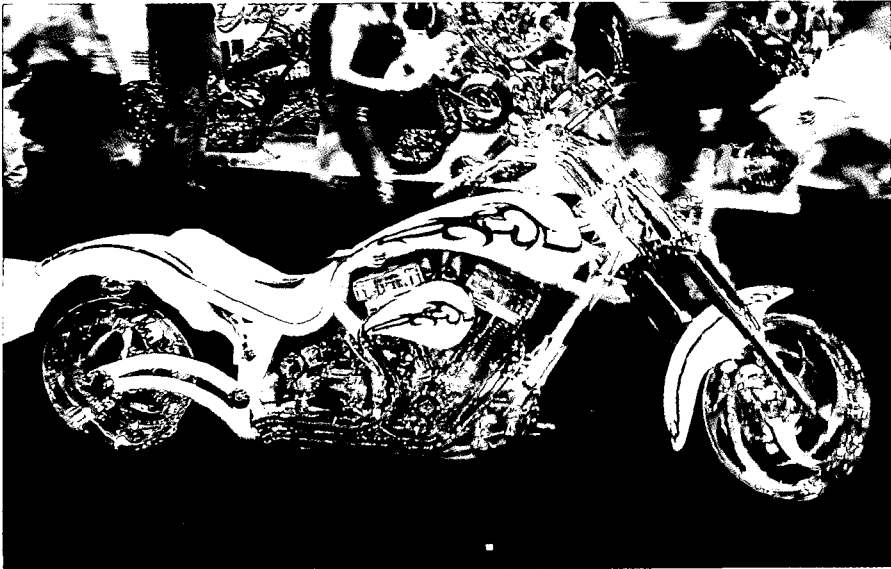
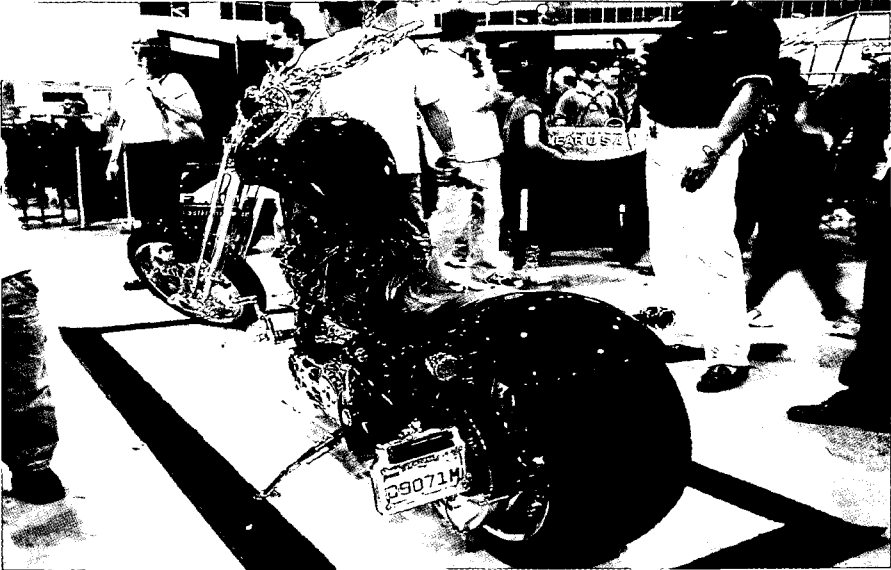
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<sup>100</sup>

The seven photographs were taken at a motorcycle show in Miami, Florida, February 2005.









The above custom motorcycles would fully comply under the umbrella of the preferred proposal, traveling on highways legally, safely and with elegance. The one time pre-title inspection is beneficial on multiple levels. If enacted, it will expose any safety equipment that may be lacking on improperly designed and assembled custom motorcycles. Further, the proposal would serve to educate inexperienced motorcycle builders of their flaws, and more importantly, it would protect public safety and usurp the need for complex litigation by stemming vehicular accidents. Certified motorcycle shops will make money through the inspection process and states will retain general oversight of the vehicles being individually built and licensed for use on their roadways. In addition, because only motorcycles deemed unfit by enumerated standards will be affected, the proposal will not substantially burden experienced custom motorcycle builders who adequately produce roadworthy products.

## X. CONCLUSION

George Newton, his girlfriend, and the family traveling home from dinner in the Section II hypotheticals deserve protection against unreasonable risk of injury as a result of the custom motorcycle industry. The automobile and truck drivers that collided with George deserve protection as well. This protection must come from new legislation. Other products already have additional legal safeguards: for example, automobile seatbelts are mandatory, smoking is prohibited in public buildings, and ground beef is inspected prior to sale. People are generally free to do as they please, but when a product is introduced that threatens public safety, legislation must step in for the greater good. This article has addressed the safety concerns amid the growing custom motorcycle industry and proposed a remedy to rectify those concerns.