

THE HORN

AAAMS, Inc.

DBA New York State Automotive Aftermarket Association

Serving the Automotive Aftermarket in North Carolina, South Carolina, Tennessee, Virginia, and New York



P.O. Box 97993, Raleigh, NC 27624 • Phone: 800-849-8037 / 919-821-1314 • Fax: 919-821-0753

www.aaamsonline.com

Bulletin No. 643

June 2022

Legal/Legislative

Design Patent Misuse is Making Car Repairs More Expensive

In the past 20 years, automakers have been increasingly misusing design patents to restrict repair choices for common car parts. In his new book, *The Right to Repair: Reclaiming the Things We Own*, copyright, trademark and property law expert Aaron Perzanowski explains how this leads to higher prices and less choices for consumers — driving home the need for legislative solutions.

The concept is relatively straightforward: excessive design patent use reduces aftermarket competition, and less competition means automakers are free to charge “inflated prices.” Indeed, research demonstrates that automaker-branded car parts can be 60% more expensive than alternative parts of comparable quality and safety. As long as automakers are allowed to misuse design patents in the aftermarket, consumers can expect to see higher prices when repairing their cars.

It doesn't have to be this way, however. By passing right to repair legislation, Congress can ensure that neither consumers' wallets nor local businesses get squashed by automakers' anticompetitive behavior. Currently, both the SMART and REPAIR Acts are sitting before Congress — both critical, bipartisan bills that would give consumers the choices and affordable prices they deserve when repairing their vehicles.

Consumers are ready for these protections, too. A recent [national survey](#) from the CAR Coalition found that 78% of vehicle-owning voters support federal right to repair legislation like the SMART and REPAIR Acts. Research from Perzanowski, published in the *Indiana Law Journal* in 2021, also shows that 86% of consumers would support legal rules requiring manufacturers to provide “parts, tools, software updates, and documentation” to independent repair shops and consumers.

CAR Coalition encourages consumers and the industry to join the growing automotive right to repair movement and [tell members of Congress](#) to support the SMART and REPAIR Acts.

Industry News

More Products Per Mile Ups ICE

The Lang Report

"Car and light product sales climbed several times faster than light vehicle mileage over the past five years (2016 through 2021). Together, the growing average age of vehicles in operation (VIO) and the increasing number of cars and light trucks topping 12 years old boosted aftermarket product volume per light vehicle mile during these five years."

"Increasing product use per mile among older vehicles will generate the continued aftermarket product growth of Internal Combustion Engine (ICE) cars and light trucks, as they dominate the older vehicle age groups for this decade and beyond."

Continued on Page 2

More Products Per Mile Ups ICE

Continued from page 1

Aftermarket Growth Factors: Three factors largely determine aftermarket product growth: vehicles in operation (VIO), annual mileage, and aftermarket product use per mile traveled. Over the past five years, these factors have experienced significant changes.

VIO Growth: 2016 to 2021: The nation's VIO increased at a moderate pace between 2016 through 2021. From 262 million cars and light trucks in operation at mid-year 2016, the VIO climbed by 6.9% over the next five years, topping 280 million in 2021. The new vehicle market averaged nearly 2 million fewer annual sales during 2020 and 2021 than the record-high new vehicle sales of the preceding five years, creating a headwind for car and light truck VIO growth.

VIO and Mileage: Covid-19 hammered light vehicle mileage to a double-digit annual loss during 2020. While mileage rebounded the following year, it did not quite return to pre-pandemic 2019 levels. Light vehicle mileage increased by less than one-fourth the annual pace of VIO growth between 2016 and 2021, 1.7% compared to 6.9%. As a result, the average car and light truck recorded lower annual mileage last year than in 2016.

Aftermarket Product Growth: Historically, light vehicle aftermarket product growth resulted from an increase in the number of cars and light trucks and the consequent mileage expansion. The situation changed between 2016 and 2021. Despite a moderate increase in the VIO (nearly a 7% gain), light vehicle miles failed to respond accordingly. The average car and light truck traveled approximately 500 fewer miles in 2021 than in 2016, resulting in light vehicle mileage climbing at a rate less than one-fourth the VIO growth.

Surprising Light Vehicle Product Growth: Despite only a 1.7% increase in total miles between 2016 and 2021 and a sizeable drop in the annual mileage of the typical car and light truck, light vehicle aftermarket product volume climbed approximately \$10 billion over these five years, a 9.2% total gain. Aftermarket product growth was 50% stronger than the VIO increase and nearly six times the pace of total light vehicle mileage growth.

Aftermarket Product Use and Mileage: There is not always a direct relationship between mileage growth and aftermarket product use. First, older vehicles generally use more aftermarket products per mile than newer cars and light trucks. Not all miles traveled are equal, with higher vehicle age being a product-use multiplier per mile. Second, the volume of Accessories (and some other products) is related more to the number of newer vehicles on U.S. roads, especially light trucks, than mileage growth.

Boost for ICE Aftermarket: The ability of the aftermarket to generate product growth from increased product use per mile traveled by older cars and light trucks is good news for Internal Combustion Engine (ICE) aftermarket volume in the coming years. Since ICE vehicles will represent virtually all cars and light trucks in older age categories for a long time, these vehicles will disproportionately contribute to aftermarket product volume compared to their percentage of the total light vehicle population and miles driven. This will be an aftermarket sales multiplier for ICE cars and light trucks over the next 10 to 20 years. ICE vehicles will continue to generate strong aftermarket sales for many years, even if the most robust estimates of EV new vehicle sales materialize.

Six Major Takeaways

- Over the past five years, significant changes have occurred in the number of vehicles in operation (VIO), miles traveled by cars and light trucks, and light vehicle aftermarket product use.
- Light vehicle aftermarket product growth has historically been generated by an increase in the number of cars and light trucks in operation, which has boosted the total number of miles driven.
- Despite a modest 1.7% increase in total mileage between 2016 and 2021 and a decline in the annual miles traveled by the typical car and light truck, light vehicle aftermarket product volume increased by approximately \$10 billion, a 9.2% total gain.
- There is not always a direct relationship between mileage growth and aftermarket product use for several reasons: older vehicles use more products per mile traveled, and the volume of Accessories (and some other products) is related more to the number of newer vehicles on U.S. roads than mileage growth.
- The ability of the aftermarket to generate product growth primarily from increased product use per mile traveled by older cars and light trucks is good news for Internal Combustion Engine (ICE) aftermarket volume over the coming years.
- Even if the most robust estimates of EV new sales come true, the ICE vehicle aftermarket will continue to generate strong aftermarket sales for many years, since virtually all cars and light trucks in older age groups will be ICE vehicles for a long time.

Consumer Skepticism Toward Autonomous Driving Features Justified

Drivers overwhelmingly want automakers to improve the performance of existing driver support features rather than develop self-driving cars

In AAA's latest survey of attitudes about automated vehicles, drivers overwhelmingly want automakers to improve the performance of existing driver support features rather than develop self-driving cars.

And this desire is backed by another round of AAA testing that reveals inconsistent performance remains a problem with available driving assistance systems, resulting in crashes with a car and a bicyclist. The failures occurred regardless of vehicle make and model. It is the third time AAA has studied these systems' performance. AAA urges automakers to listen to consumers and improve what is currently available before focusing on future technology.

"You can't sell consumers on the future if they don't trust the present," said Greg Brannon, director of AAA's automotive engineering. "And drivers tell us they expect their current driving assistance technology to perform safely all the time. But unfortunately, our testing demonstrates spotty performance is the norm rather than the exception."

Consumers surveyed told AAA they are more interested in improved vehicle safety systems (77%) versus self-driving cars (18%). But new testing, the third round by AAA's Automotive Engineering team in the last few years, found that vehicles with an active driving assistance system (also known as Level 2 systems as [defined by SAE](#)) failed to consistently avoid crashes with another car or bicycle during 15 test runs. A foam car similar to a small hatchback and a bicyclist dummy was used for this testing.

- A head-on collision occurred during all 15 test runs for an oncoming vehicle within the travel lane. Only one test vehicle significantly reduced speed before a crash on each run.
- For a slow lead vehicle moving in the same direction in the lane ahead, no collisions occurred among 15 test runs.
- For a cyclist crossing the travel lane of the test vehicle, a collision occurred for 5 out of 15 test runs, or 33% of the time.
- For a cyclist traveling in the same direction in the lane ahead of the test vehicle, no collisions occurred among 15 test runs.

While the refinement of available active driving assistance systems improves, drivers must remain continuously engaged in the driving task. The research vehicles performed as expected during the closed-course testing for routine situations, such as approaching a slowing moving vehicle or bicyclist from behind.

However, all test vehicles collided with either the simulated passenger car or the adult cyclist multiple times during "edge-case" testing, such as a car approaching head-on or a bicyclist crossing directly in front of the test car. This reinforces [recent AAA research](#) calling for direct driver monitoring systems with camera-based technology to be integrated into active driving assistance systems.

"While it may be encouraging that these driving systems successfully spotted slow-moving cars and bicyclists in the same lane, the failure to spot a crossing bike rider or an oncoming vehicle is alarming," said Brannon.

Active driving assistance systems are widely available and often called semi-autonomous because they combine vehicle acceleration with braking and steering. Since 2016, AAA has surveyed consumers about driving assistance systems and self-driving cars to track sentiment regarding emerging vehicle technology.

Key survey findings demonstrate that while consumer interest in driving assistance vehicle technology remains steady, there is more interest in familiar features that consumers perceive to be designed for their safety, such as automatic emergency braking.

Meanwhile, consumer distrust of fully self-driving vehicles remains high. AAA found 85% are fearful or unsure of self-driving technology, a level that has remained steady for the past several years. When transporting their children or loved ones, 85% also said they would not be comfortable with using a self-driving vehicle.

A troubling belief in commercially available self-driving cars was also revealed in the data, with 12% incorrectly thinking they could buy such a vehicle while 53% were unsure if they could.

Previously, AAA found that active driving assistance systems failed to maintain lane position in real-world conditions consistently and had other challenges in closed-course testing.

Consumer Survey Methodology

The AAA consumer survey was conducted on Jan. 13-16, using a probability-based panel to represent the U.S. household population overall. The panel provides sample coverage of approximately 97% of the U.S. household population. Most surveys were completed online; consumers without internet access were

Continued on page 4

Consumer Skepticism Toward Autonomous Driving Features Justified

Continued from page 3

surveyed over the phone. A total of 1,107 interviews were conducted among U.S. adults 18 years of age or older. The margin of error for the study is 4% at the 95% confidence level.

Vehicle Testing Methodology

Closed course testing occurred at AAA Northern California, Nevada, and Utah's GoMentum Station proving ground in Concord, Calif. Using a defined set of criteria, AAA selected the following vehicles for testing: 2021 Subaru Forester with "EyeSight," 2021 Hyundai Santa Fe with "Highway Driving Assist," 2020 Tesla Model 3 with "Autopilot" and were sourced from the manufacturer or specialty rental fleets

Energizing Our Vehicles in the Future will Require Advanced Technologies ... Let's Learn About AGM and EFB (Part 1)

By: Jarod Adams, V.P. Sales, Interstate Batteries

In this 2-part series we will break down some of the advances in Automotive Starting Batteries. In 2022, the tagline Automotive Starting Batteries is no longer an adequate description for what we ask this product to do. Our vehicles have become data hubs loaded with safety, comfort, and entertainment features resulting in the average car having 30-50 computers and can require over 100 million lines of computer coding. The trend is not slowing down the least bit, we are on the brink of fully autonomous vehicles, and today nearly every manufacturer has a version of driver assist whereas the vehicle will steer, slow down, accelerate and even change lanes without the driver's aid. In this article we will explore two technologies that have been developed to take on the growing demands of the vehicle's "starting battery."

What is AGM and how does it work? The first technology we will explore is AGM or Absorbed Glass Mat. Developed in the late 1970's for non-automotive use, an AGM battery is designed to deliver the quick starting burst required, but will also sustain longer draws on the battery, for running all the various technologies packed into today's vehicle. AGM batteries contain more lead, which helps deliver more power, and this is accomplished with Glass Mats which act like a sponge, cushioning the ultra-thin lead plates. In turn, manufacturers can squeeze more glass mats and lead into one battery. This process packs the inside of the battery much tighter than a standard lead acid battery. This allows these batteries to be shipped overnight or via "air" which creates some distribution advantages (home delivery).

AGM's fundamental chemistry is still based on lead, sulfuric acid, and water. When you engage the battery the acid molecules move to the lead plates, leaving water and lead sulfate. This removes the sulfuric acid to enable a chemical reaction between the plates and the paste. Charging the battery reverses the process. There is always a chance some water loss can happen when electricity splits H₂O into hydrogen and oxygen gases. Losing those water molecules means the electrolyte stays more acidic than usual — cutting into the potential strength of the chemical reaction on the plates, and ultimately shortening the life span. The AGM's valve stops those gases from leaving. This helps drive some of the durability expected from AGM.

Next is maybe the most critical piece, the fiberglass mesh mats. Ultra-thin glass fibers soak up all the electrolyte (water and sulfuric acid) into thin mats padding the lead plates. Instead of the free-flowing liquid inside of a regular car battery, the AGM carries its charge in soaked sponges coating the lead plates. The glass mats' complete coverage of the lead plates means more electrons are flowing making it easier to summon more power from an AGM battery.

Is AGM worth the extra cost? We learned some basic principles with how AGM works, now we will dive deeper into some of the advantages of AGM. Because we are packing more lead into an AGM and an integrated valve that prevents gases from leaving, an AGM will last **significantly more cycles** than a standard flood acid battery. This is why you will find AGMs often used in Start/Stop applications which put significantly more stress/load on the battery (60,000 starts over the battery's life). AGMs can **charge faster** which helps the rebounds required on start/stop and helps in extreme weather conditions. AGMs also have **higher reserve capacity** which allows for more energy to power all the various electronics in today's modern vehicle (including cell phones, laptops, and TV monitors). You can retrofit a non-OE AGM application with AGM and should expect the **improved performance** described above (including extreme weather), however you cannot retrofit a standard flooded battery for a vehicle which had an AGM battery equipped from the factory (OE).

Continued on page 5

Energizing Our Vehicles in the Future

Continued from page 4

Above are some of the benefits AGM can deliver in today's vehicle; it also has great performance, given the increased reserve capacity for Commercial Trucks, Marine, RV, Stationary Engines as well as improved durability with the increased starting cycles.

The challenging part of AGM – manufacturing them. An AGM battery can take two times longer to form than a standard lead acid battery. Globally, we were already stretched from a production capacity perspective, with nearly all battery manufacturers being tapped out with lines being fully utilized. Now consider more and more vehicles are requiring AGM as original equipment on the vehicle and it becomes obvious why we are experiencing a "constrained market." The barrier to entry for standing up new lead acid factories is high, extremely high. It stems from the challenges around employee and public safety with contamination in soil, air, and water if not properly managed. There are only a handful of manufacturers in the United States producing lead acid batteries today, whether standard flooded or AGM, and the likelihood of more entering the space is not very high. To further complicate this, there are future technologies on the horizon such as Lithium, which can slow an investor or manufacturer's desire to jump all in.

Trends show that by 2030 up to half or 50% of the automotive replacement batteries could be AGM. Today we are sitting around 12%-14% of the automotive starting batteries in the US and Canada requiring an AGM.

If you would like information on upcoming clinics, contact Randy at 1-800-849-8037 or rlink@aaamsonline.com.

Management Notes

How to Stand Out in Business and Sales

By John Chapin

These days it's extremely easy to stand out in business and sales. Work ethic, sales skills, follow-up, and attention to detail are all at historic lows in many sales forces. Here are some ideas that will help you stand out from all salespeople, even the best. Some of these are tips for standing out among other salespeople from a client perspective, others are tips for standing out from a peer perspective. Many of these will make the average salesperson groan because they require next-level commitment and hard work. The top salespeople on the other hand will love these, and probably already do most of them.

Ways to stand out from other salespeople:

- Follow-up with leads nine to thirteen times, and in some cases, more. Eighty-one percent of sales and appointments are made after the fourth contact.
- Answer your phone nights and weekends.
- Respond to e-mails nights and weekends.
- Answer your phone right away or return calls within an hour or two.
- Return e-mails within a few hours.
- Always follow up on issues, even if you handed it off to someone else.
- Continually improve your sales and customer service skills.
- Never stop learning and be coachable.
- Always be growing personally and professionally.
- Learn as much as you can about each of your clients.
- Stay up to date on everything going on in your industry and with your clients' businesses. Join associations, read industry publications, etc.
- Constantly look for new ways to make your clients' lives easier. Find other ways to help your clients and solve their problems, both those related to your business and those not.
- Connect other people.
- Make it as simple as possible for people to do business with you. Eliminate anything in the sales process

Continued on Page 6

How to Stand Out in Business and in Sales

Continued from page 5

- When you send something for someone to fill out, give them an estimated time frame of how long it will take to fill out. Also, fill in as much as you can ahead of time.
- Let as little time as possible pass between the decision to buy and signature on the contract.
- Communicate via their preferred mode of communication.
- Deliver more than promised and expected; go the extra mile.
- Be early for appointments.
- Always open with an affirmative response.
- Focus on what you can do, not what you can't.
- Always be honest and operate with complete integrity.
- Always focus on the prospect's or client's needs first and always do what is in their best interest.
- Be over-prepared for all sales calls and interactions.
- Know exactly what to do and say in all sales situations.
- Make more sales calls than you have to.
- Always do one more... make one more call, send one more thank-you note, make one more contact.
- Always have a great attitude.
- Be enthusiastic.
- Always put in extra effort.
- Persist and persevere.
- Be known as the hardest worker, or one of the hardest workers anyone knows; your goal is to outwork everyone else.
- Get along with people.
- Send hand-written thank-you notes in blue ink.
- Focus on building many good, solid, long-term relationships with clients, co-workers, friends, and family.
- Always be building and nurturing your network.
- Prospect and build your business every day.
- Overcommunicate. Don't make a client call you to follow up on something.
- Make the call you've been thinking about forever, but have been putting off because you're afraid to make it.
- Live by the rules: the client is always right and the client always comes first.
- You're going to have to fail a lot to be successful in sales. Your goal should be to at least double your failure rate.

Here are some things to do to make your life better

- Do hard things
- Invest in yourself to become better professionally and personally. Read books, take courses and classes, go to seminars, and do other things to constantly improve.
- Surround yourself with the right people.
- Surround yourself with the right environment.
- Don't make excuses.
- Pay close attention to the details.
- Don't be afraid to make mistakes. Just make sure they aren't thoughtless or repeated mistakes.
- Focus on solutions, not problems or who's to blame. There will be time to analyze what happened later. Fix the problem first.
- Be accountable and take 100% responsibility for everything in your life.

Finally, here are a couple of Zig Ziglar quotes related to the above:

"The harder you are on yourself, the easier life will be on you."

"You can get everything you want in life if you help enough other people get what they want."

Johnchapin@completeselling.com

ASE adds 'ADAS Specialist' Certification Test

The National Institute for Automotive Service Excellence (ASE) has introduced an Advanced Driver Assistance Systems (ADAS) Specialist Certification test (L4). The test is designed to identify technicians who possess knowledge of the skills required to diagnose, service and calibrate ADAS on automobiles, SUVs and light-duty trucks.

“Because ADAS service is becoming a very important vehicle repair service, our stakeholders requested that we develop a certification test that demonstrates that automotive service professionals are qualified to perform ADAS service,” Tim Zilke, ASE president and CEO, said. “We worked closely with service technicians, service representatives from vehicle and engine manufacturers, aftermarket trainers and technical educators to develop questions that deal with practical problems experienced by technicians in their work with vehicles that include ADAS.”

The ASE ADAS Specialist test (L4) will cover content focused on the diagnosis, service and calibration of radar, camera, ultrasonic and other advanced driver assistance systems. Many of the questions relate to a sample vehicle with advanced driver assistance systems technology used by most manufacturers. This vehicle is described in the composite vehicle type 1 reference booklet that is provided as an electronic pop-up during the test.

To register for the ADAS Specialist test (L4), automotive service professionals must have passed either the Automobile Electrical/Electronic Systems (A6) or Collision Mechanical and Electrical Components (B5) test. There is a study guide available for individuals planning on taking the ADAS Specialist Certification test to help in test preparation. For more information about the new ADAS Specialist Certification test and registering, visit <https://ase.com/test-series>.

Association News

2022/2023 AAAMS, Inc./NYSAAA Scholarships Awarded

The Trustees of the AAAMS, Inc. Education Trust and the New York Scholarship Committee are pleased to announce the recipients of Scholarship Grants for the 2022/2023 school year. Four (4) \$1,000.00 Scholarships were awarded this year.

Here are this year's Scholarship Recipients:

AAAMS, Inc.

- \$1,000.00 Scholarship - Collin Scalla (Collin is from McDonald, TN and will be attending Lee University, Cleveland, TN. He will be majoring in Business).
- \$1,000.00 Scholarship - William Chambers (William is from Wake Forest, NC and will be attending N.C. State University. He will be majoring in Engineering).

NYSAAA

- \$1,000.00 Scholarship (John Lorenzen Scholarship) - Ian Gacek (Ian is from Marathon, NY and will be attending SUNY Canton. (He will be majoring in Automotive Technician Studies).
- \$1,000.00 Scholarship (Debbie Tranello Scholarship) - Calvin Keller (Calvin is from Kinderhook, NY and will be attending SUNY Cobleskill. He will be majoring in Diesel/Heavy Duty Studies).

We congratulate these fine young people and give them our utmost good wishes as they continue their higher educational pursuits.

2023 Advertising Calendars: Early Bird Discount

Again this year, we have enhanced the AAAMS, Inc./NYSAAA Calendar and Promotional Items Program. The "Early Bird Discount" runs through June 30, 2022 this year. All calendar orders placed and received by this date will qualify for discounts as shown on the Calendar Order Form...excluding freight and taxes.

There are a few changes to the Program this year:

- The Calendar Supplier is no longer allowing the option of having the Calendars shipped after October 15...they will ship when printed -- and you will be invoiced shortly thereafter (HOWEVER, THIS YEAR WE WILL OFFER A 4% PROMPT PAY DISCOUNT OFF THE TOTAL AMOUNT INVOICED [EXCLUSIVE OF FREIGHT AND TAXES] IF PAID WITHIN 10 DAYS OF THE INVOICE DATE);

Continued on Page 8

2023 Advertising Calendars: Early Bird Discount

Continue from page 7

- There are Extra Sheet Option Charges this year as opposed to previous years;
- There will be an Imprint Set-Up charge of \$20.00 this year added to the invoice;
- There are Bonus Items available this year as opposed to some past years (i.e. Sticky Notes, Pens, etc.);
- No over runs.

All members/non-members ordering Calendars from us in recent years will soon be receiving a copy of this year's Order Form and Calendar information.

If you would like such information immediately (or have not ordered in the past), call Randy at 800-849-8037 or email rlisk@aaamsonline.com.

Gas Relief

As a business owner, you constantly have an eye on the bottom line. Gasoline prices continue to have a huge impact on your delivery cost and ultimately on your overall bottom line. With some analysts forecasting prices at the pump over \$5.00 a gallon in many places this summer, there doesn't seem to be any relief in sight. Business owners use a variety of methods to help them control their delivery expenses. Some owners have implemented delivery surcharges or minimum invoice amounts for delivery. One of the easiest ways to control your delivery costs is to sign up for the AAAMS, Inc./NYSAAA SuperFleet program. If you've been putting it off, don't wait any longer...start improving your bottom line today. This program is one effective way to keep your delivery cost down. If you deliver parts to your customers, you are using gas, so why not join other AAAMS, Inc./NYSAAA members and save 5 cents per gallon on all your gasoline?

Don't miss another month of savings on this program. As an added incentive anyone signing up for the program will save an additional 25 cents per gallon (total 30 cents per gallon) for the first 90 days. So whether you have 1 vehicle or 100, you qualify for the discount based on the AAAMS, Inc./NYSAAA group volume. Please call Randy at 1-800-849-8037 or email rlisk@aaamsonline.com for more details.

Independence Day Office Schedule

The Association Office will be closed on Monday, July 4, 2022 in observance of Independence Day
Have a Great Holiday!

— Randy Lisk, Executive VP - AAAMS, Inc./NYSAAA

