

Testimony of the Auto Care Association
Presented by
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My name is Aaron Lowe and I am Senior Vice President for Regulatory and Government Affairs at the Auto Care Association. The Auto Care Association is a national trade association comprised of 3,000 members that manufacture, distribute sell and install motor vehicle parts, accessories, tools, equipment, materials and supplies. While many of our members supply motor vehicle manufacture, we represent the independent repair industry, meaning that the products are sold and installed outside of the vehicle manufacture and authorized dealer network.

The independent auto care industry is a \$341 billion market, employing more than 4.3 million people in the U.S. and representing over 2 percent of the U.S. gross domestic product. Once a new car warranty expires, about 70 percent of car owners go to independent repair shops over their new car dealer alternative based on trust, convenience and price. For perspective, there are nearly 8,000 independent repair shops in North Carolina and 672 shops in Delaware.

The importance of an affordable and convenient repair market has been highlighted by the fact that car owners are keeping their vehicles longer than ever before. The average age of a vehicle is now 11.9 years, up from 11.8 last year and 10.8 years, just ten years ago. In fact, the existence of a competitive repair market has ensured that vehicle ownership remains affordable in the U.S. Further, our industry has been essential during the pandemic, helping to keep vehicle operating properly so that they can take families to the store and for medical treatment; and for first responders so that they can care for those families.

However, the ability for consumers to obtain affordable repairs is being challenged like never before. Anyone who has looked under the hood of today's vehicles can see that they have become computers on wheels. Vehicle manufacturers are increasingly using firmware and software to control the function and operation of motor vehicle parts. In fact, a lot has changed since the Digital Millennium Copyright Act (DMCA) was enacted back in 1998. As you can see from the chart at the end of my testimony, in 2000, a 2001 Chevy Suburban had 9 electronic control modules; a 2015 version of the same model had 70 modules, and in 2021, the Suburban comes equipped with 103 modules. In 2025, the Chevy Suburban is expected to have 150 modules. Specifically, today's engines, transmission, oxygen sensors, ignitions, brakes, emissions systems, electric windows, air blowers, air bags and even windshield wipers that used to be controlled by electro-mechanical, are now are controlled by microprocessors and software.

The use of software provides challenges to both companies building competitive replacement parts for late model vehicles and to technicians attempting to repair these complex vehicles. Notwithstanding the costs and training involved in meeting this technical challenge, our industry is up to the task. Independent parts manufacturers are investing heavily in the development and testing of replacement parts to ensure that they can work properly with these sophisticated vehicle systems. Further, technicians are investing in the recruiting and training of technicians so that they are up to the task of providing proper diagnostics and repair for these complex vehicles.

In addition, Auto Care has been a strong proponent of right to repair legislation that ensures that independent shops have access to the same information and tools that vehicle manufacturers make available to their franchised dealers. Such access is essential due to the complexity of today's vehicles. In 2012, Massachusetts voters approved a motor vehicle right to repair law and, subsequently, a Right to Repair Memorandum of Understanding was signed between the manufacturers and the auto care industry where the manufacturers committed to comply with the Massachusetts law nationwide.

I want to emphasize that while the right to repair laws have provided extensive benefits to competition, these laws and agreements do not fully address the impacts that software is having and may potentially have on the availability of aftermarket parts and service to consumers.

For decades, consumers have had the right to repair their motor vehicles in whatever way they choose. Cleaning, repairing and refurbishing parts, or replacing worn or broken parts historically has been considered permissible repair; not infringing reconstruction under patent law. When repairing motor vehicles, a technician may replace a broken part, or repair or rebuild the consumer's existing part. Where replacement parts are needed, the technician or the consumer can choose between a new part sold by the vehicle manufacturer, new parts from independent sources or a remanufactured part available from either the OEM or an independent source. In many cases, a used part removed from a vehicle may be refurbished or remanufactured and used to repair another vehicle. For example, replacing a vehicle's engine or transmission with parts taken from other vehicles is a common practice and considered lawful, as well as economically and ecologically beneficial.

This right to repair has been ingrained over the years in patent law which until recently has been the primary method for vehicle manufacturers to protect their products from copying. Patent law protects innovation in the design of a part, but does not prevent the repair or the availability of parts from competitive sources. Now that software has become so prevalent on today's vehicles, copyright law is taking a much more important role in the automotive area.

Congress enacted DMCA in order to protect expressive work from being copied through circumvention of software. The use of software by the vehicle repair market is strictly related to the functional aspects of that work, clearly outside of the scope that Congress sought to protect when it enacted DMCA. However, over the last few years, original equipment

manufacturers of motor vehicles (OEMs) have attempted to wield Section 1201 of the DMCA as an offensive weapon to stop consumers and businesses from competing to repair or customize their vehicles, or to supply replacement parts for these vehicles. Through the use of technological protection measures (TPM), manufacturers have attempted prevent access to software by independents for the purpose of the legal development of replacement parts and the ability to undertake repairs. In some cases, the allegedly protected “software” is uncopyrightable data, not a copyrightable program. In others, the anticompetitive motive is even clearer, by assuring that every module must be tied to the vehicle’s VIN number, so that no replacement part would function unless it was OEM produced part.

A further competitive concern by our industry is the increasing use of telematics systems that permit vehicle data regarding the operation of sensors to be transmitted wirelessly from a vehicle. The use of such data could provide benefits to vehicle owners, by allowing for remote diagnostics, the ability to predict parts failures before they occur, and the ability to increase supply chain efficiency. However, all of this data is currently captured only by the original equipment manufacturer, meaning that consumer benefits from more efficient and innovative vehicle services that might be available, are limited; and any financial gains accrue only to the manufacturer of the vehicle. Since this data is generated through the use of the vehicle by the owner, the owner should be permitted to control this data and make it available to parties they choose to do business with. As manufacturers continue a trend of locking down the on-board diagnostic system and placing more diagnostic data in their clouds, it will make them the full gatekeeper over who can obtain the data and how that data is used, thus reducing choices to consumers over how their vehicle is serviced.

Auto Care believes that Congress should consider amending DMCA to ensure that the Act cannot be used to provide for otherwise lawful use of software for the production of competitive parts or repair of products. Yes, the Auto Care Association and others have been successful in obtaining temporary exemptions through the 1201 process and those exemptions have been helpful in clarifying that car owners and third party repairers do not violate DMCA by circumventing software in order to repair a vehicle. However, it should be noted that those exemptions are extremely limited in scope and many entities involved in the vehicle repair process do not have the know how or means to circumvent the TPMs being utilized by manufacturers.

Key to ensuring that repairs and parts can be provided for late model vehicles include the need to copy a piece of software on to a part to make sure it works with the rest of the system; the need to circumvent software to ensure that a replacement part can be built to be compatible with the rest of the system or a tool is required to transfer the software from the old part to a new one being replaced.

Another factor in ensuring a competitive repair market, is the availability of tools that are essential to properly diagnosing and repairing late model vehicles. Given the number of software routines in each car, the complexity of the software, and the robustness of technological measures, a single consumer would find it daunting to circumvent and repair

every possible module in a motor vehicle without assistance. Similarly, it is unrealistic to expect that every independent repair shop would be able to perform these tasks for literally hundreds of makes and models of motor vehicles over their useful life unless tools that have effective functionality for all makes and models are available.

In summary, the Association recommends that DMCA specifically be amended to ensure that the law cannot be used to prevent aftermarket companies from carrying out legal activities necessary to build compatible replacement parts or to undertake repairs. This includes the right to:

- Circumvent technological protection measures in order to access the software.
- Make interim copies of the software.
- Analyze the software code.
- Alter the code for purposes of repair or modification, or to develop an alternative program to replace the OEM-supplied software.
- Make a replacement copy of the software with any alterations.
- Embed the replacement copy in either the original repaired or refurbished part or a replacement part.
- Permit skilled third parties to develop, market, and use circumvention tools.

Enacting legislative revisions that provide for the ability to provide competitive parts and repairs will ensure that all parties throughout the supply chain in the auto care industry have confidence that they can provide products and services demanded by car owners with some assurance that the courts will protect them from actions by the manufacturers to protect their software access.

Absent a legislative revision providing for the ability to circumvent TPM's and build tools that permit circumvention for purposes of repair, Congress should consider revising the rules to permit exemptions that are granted to be permanent unless challenged successfully during the triennial process. The current system requires the Association and other groups to apply for an exemption every three years. It is unlikely that the circumstances behind an exemption has changed in the three years following the granting of exemption by the Copyright Office, and often there is no opposition to the exemption petition. Still, under the current scenario, the copyright office must undertake the full rulemaking process. This is a tremendous waste of time and resources with no benefit to any stakeholders in the process.

The Association strongly encourages that the exemption process be revised such that exemptions be permanent subject to review every three years if they are challenged. Absent any challenge, the exemption remains in place without any action needed by the Copyright Office. If there is a challenge, then the challenging party must submit data that indicates what circumstances have changed that would force the copyright office to withdraw or modify the exemption.

Thank you for the opportunity to testify on this critical and timely issue. We stand ready to assist the committee in working on any possible revisions and look forward to answering any questions from the members.

