

White Paper on the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, 117th Congress

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September 2022

* The CAR Coalition provided financial support for this White Paper. The views expressed are my own.

Executive Summary

The Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, addresses a significant and growing problem facing U.S. consumers. As modern vehicles increasingly integrate software code, electronic sensors, and telematics systems, vehicle manufacturers and their franchised dealers enjoy privileged access to vehicle data, diagnostic codes, and other information necessary for repairs. By denying consumers and their preferred independent repair providers access to this crucial information, carmakers and dealers can reduce competition and increase the cost of vehicle repairs. Such restrictions are inconsistent with the rights car owners have grown to expect and squarely at odds with a healthy, competitive market for repair services.

Consumers' right to repair the products they buy is an inherent incident of ownership. That right is rooted in common law principles that date back half a millennium. English and American courts have a long tradition of hostility to post-sale restrictions on personal property. Once a good is sold, manufacturers and sellers have little power to dictate how it is used as a matter of personal property law. As the Supreme Court has emphasized twice in recent years, intellectual property law in the United States recognizes this tradition through the principle of exhaustion. After the first sale of a copyrighted, patented, or trademarked product, the initial rights holder has no power to restrict its subsequent disposition, nor can they interfere with efforts to repair that product. In short, the right to repair is inseparable from ownership.

Historically, automobile aftermarkets in the United States have adhered to these principles and respected consumers' right to repair. As a result, auto repair has been characterized by consumer choice, robust competition, reasonable prices, and reliable quality. The availability and affordability of repair are major contributors to the durability of the U.S. auto fleet. The average car on the road today is more than twelve years old. And when those vehicles need repairs, consumers prefer independent repair providers to franchised dealers by a wide margin.

For more than thirty years, existing federal law has reflected a policy favoring equal access to repair information. In the Clean Air Act Amendments of 1990, Congress

mandated on-board diagnostic (OBD) systems capable of alerting vehicle owners of needed repairs for emission-related components, storing fault codes, and providing access to vehicle information. In doing so, Congress ensured that information was accessible through standard connectors, and it prohibited the use of access codes or other restrictions that would inhibit access by consumers and independent repair providers.

In the intervening decades, manufacturers developed a number of techniques for restricting consumers' and independent repair providers' access to essential repair information and tools. Those tactics include encrypting software and data, adopting non-standard interfaces, as well as rerouting vehicle performance and diagnostic data from the standard OBD system to closed telematics systems, which transmit data directly to manufacturers and dealers, excluding independent providers.

In response to these developments, we've seen legislative interventions at the state level. In 2012, Massachusetts passed automotive right to repair legislation through both the standard legislative process and an overwhelmingly popular ballot initiative. After taking effect in 2013, it was quickly adopted as the model for a private, nationwide Memorandum of Understanding between trade groups representing both the major carmakers and aftermarket parts and service providers. While that MOU helped restore competition in the repair market, its provisions no longer adequately safeguard the interests of consumers and independent repair providers. Shifts in vehicle design, the increasing reliance on telematics systems, the growing popularity of electric vehicles, and the emergence of new manufacturers not bound by the MOU all limit the ability of this private agreement to address anticompetitive behavior in the auto repair market.

To adequately address these problems, federal legislation is necessary. The REPAIR Act offers a sensible, forward looking, nationwide solution that protects the rights of vehicle owners and promotes a robustly competitive repair industry. The REPAIR Act achieves this through three key approaches. First, it prohibits manufacturers from using technological barriers, legal waivers, or other measures to impede vehicle owners or their designees from accessing vehicle data, repair information, and tools. Likewise, manufacturers are barred from preventing the diagnosis or repair of vehicles using the same methods as their dealers.

Second, the Act requires affirmative steps on the part of manufacturers to facilitate owner control and independent repair of vehicles. They must provide access to vehicle-generated data to car owners and their designees without restriction or limitations. Moreover, manufacturers must make repair information and tools available to vehicle owners, repair facilities, and makers of aftermarket parts on fair and reasonable terms. After the development of necessary regulations, manufacturers would be required to

make vehicle-generated data available to vehicle owners and their designees wirelessly through a standardized platform.

Finally, the REPAIR Act harnesses industry and regulatory expertise to ensure the safety, security, and privacy of consumers with respect to vehicle data. The Act calls on the Federal Trade Commission (FTC) and National Highway Traffic Safety Administration (NHTSA) to designate an independent entity to administer secure access to standardized platforms for vehicle data. That independent body would include aftermarket part manufacturers, telematics providers, and vehicle manufacturers. In addition, the NHTSA would issue regulations and standards to safeguard the security of vehicle-generated data.

On both the state and federal levels, legislators and regulators have undertaken or proposed a range of interventions designed to address the growing problem of repair restrictions. Those policies address a number of real and pressing concerns across industries, from consumer electronics to agricultural equipment. The REPAIR Act, while consistent with the underlying goals of those efforts, provides a distinct set of benefits. Taken together, the provisions of the REPAIR Act would establish a comprehensive federal framework that affirms the rights of consumers, promotes competition in the auto repair market, and ensures safety and security.

Introduction

In recent decades, manufacturers have increasingly incorporated software code, electronic sensors, and telematics systems into their vehicles. Although these developments have enabled new and valuable features, they have also given manufacturers and their franchised dealers greater control over vehicle repair. By restricting access to software code, vehicle-generated data, and diagnostic and repair information, manufacturers and dealers enjoy significant competitive advantages over independent repair providers. As a result, consumers must contend with fewer choices and higher prices in the repair marketplace. The Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, would empower consumers by requiring manufacturers to make vehicle data and repair information available to car owners and their designated repair providers through a standardized, secure platform. In doing so, the REPAIR Act would restore the robust competitive environment that U.S. car owners have come to expect and depend upon.

Independent repair is reliable, effective, and less expensive than comparable service from a franchised dealer. Not surprisingly, consumers overwhelmingly prefer it. But

restrictions on access to vehicle data, diagnostic codes, and other repair information makes it harder for consumers to exercise this favored alternative. Because dealers enjoy preferred access to the information stored and transmitted by consumers' vehicles, the playing field is tilted in their favor—and against consumers and the tens of thousands of independent repair shops across the United States. If enacted, the REPAIR Act would eliminate the artificial barriers to repair that frustrate consumer choice and cost them billions of dollars each year. Moreover, it would restore federal policy favoring unrestricted access to vehicle data by repair providers first enacted more than thirty years ago, updating existing law to ensure both vehicle safety and consumer privacy.

The Right to Repair is an Incident of Ownership

The law is generally hostile to post-sale restrictions, including limitations on repair. For centuries, that has been true as a matter of both personal property and intellectual property law. This hostility grows out of deep concerns over the alienability of goods in the stream of commerce and respect for owners' autonomy to use the products they purchase as they see fit.

As early as the 15th century, English property law recognized that once an owner of "a horse, or of any other chattel" sells that item, "his whole interest ... is out of him."¹ Having transferred personal property rights to the buyer, conditions on the alienation of that property are void as "against Trade and Traffique."² Following that tradition, courts in the United States have resisted downstream restrictions on personal property on the grounds that they offend against the ordinary and usual freedom of traffic in chattels.³ Such restraints are inconsistent with the essential incidents of a right of general property in movables, and . . . obnoxious to public policy, which is best subserved by great freedom of traffic in such things as pass from hand to hand."⁴ This rejection of efforts to impose post-sale restrictions on personal property has not been limited to restrictions on alienation. More broadly, courts spurned servitudes on personal property that would have allowed a seller to restrict the post-sale use of the goods in question.⁵ Such

¹ Edward Coke, *Institutes of the Laws of England* § 360, p. 223 (1628). This work refers to the 15th century writer, Littleton. See Charles M. Gray, *Two Contributions to Coke Studies*, 72 U. Chi. L. Rev. 1127, 1135 (2005).

² Coke, *supra* note 1 at §360.

³ John D. Park & Sons Co. v. Hartman, 153 F. 2d 39 (6th Cir. 1907).

⁴ *Id.*

⁵ See Zechariah Chafee, Jr., *The Music Goes Round and Round: Equitable Servitudes and Chattels*, 69 Harvard L. Rev. 1250, 1261 (1956); Thomas W. Merrill & Henry E. Smith,

restrictions create a host of problems at odds with an efficient market. They typically lack sufficient notice to both present and future buyers, limit the valuable uses to which scarce resources can be put, and impose significant information costs on those who come into contact with potentially restricted goods.⁶

This aversion to post-sale restrictions is so strong that it limits the scope of intellectual property rights as well. Although copyright, patent, and trademark law constrain the use of personal property to some extent, they nonetheless incorporate a core skepticism to post-sale restrictions that interfere with alienation and use. The principle of exhaustion holds that when an embodiment of a work protected by some intellectual property right passes from the rights holder to a consumer, the rights holder's power over that particular embodiment is diminished.⁷ As the Supreme Court has recognized in recent years, that principle is a direct outgrowth of the centuries-old tradition outlined above.⁸

Under U.S. copyright law, the first sale doctrine is the best known exhaustion rule. It provides that the owner of a lawful copy of a work is free to sell or otherwise dispose of that copy as they see fit, regardless of the objections of the copyright holder.⁹ The first sale doctrine is the legal basis for public libraries, used record stores, and other secondary markets for copyrighted goods. Courts have long understood it to be copyright law's reflection of the common law aversion to impeding the free flow of goods.¹⁰ In its most recent first sale case, the Supreme Court held that goods were subject to the rule regardless of where they were first manufactured.¹¹ That case directly concerned the

Optimal Standardization in the Law of Property: The Numerus Clausus Principle, 110 Yale L.J. 1, 8 (2000); Molly Shaffer Van Houweling, *The New Servitudes*, 96 Geo. L.J. 885, 897–8 (2008).

⁶ Id.

⁷ See generally, Aaron Perzanowski & Jason Schultz, *Reconciling Personal and Intellectual Property*, 90 Notre Dame L. Rev. 1211 (2015).

⁸ *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 538–39 (2013) (“The ‘first sale’ doctrine is a common-law doctrine with an impeccable historic pedigree.”); *Impression Prod., Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523, 1526, 198 L. Ed. 2d 1 (2017) (“The exhaustion rule marks the point where patent rights yield to the common law principle against restraints on alienation.”).

⁹ 17 U.S.C. § 109(a).

¹⁰ See *Sebastian Int'l, Inc. v. Consumer Contacts (PTY) Ltd.*, 847 F.2d 1093, 1096 (3d Cir. 1988); *Burke & Van Heusen, Inc. v. Arrow Drug, Inc.*, 233 F. Supp. 881, 883–84 (E.D. Pa. 1964)

¹¹ *Kirtsaeng*, 568 U.S. 519.

importation of textbooks for sale in the United States, but the Court notably recognized the stakes for other goods, including automobiles:

Technology companies tell us that automobiles, microwaves, calculators, mobile phones, tablets, and personal computers” contain copyrightable software programs or packaging. Many of these items are made abroad with the American copyright holder’s permission and then sold and imported (with that permission) to the United States. A geographical interpretation [of § 109] would prevent the resale of, say, a car, without the permission of the holder of each copyright on each piece of copyrighted automobile software.... Without that permission a foreign car owner could not sell his or her used car.¹²

Copyright law’s recognition of the rights of owners is not limited to the first sale doctrine. It also permits owners to publicly display the copies they own without copyright holder permission, an essential limitation for museums.¹³ And section 117 of the Copyright Act allows owners of copies of software to reproduce them as necessary to run the software and for archival purposes, to adapt them to run in new software or hardware environments, and to transfer copies of the software they purchase so long as they delete the copies in their possession.¹⁴

For well over a century U.S. copyright law has acknowledged a right to repair as an outgrowth of the exhaustion principle. In 1901, the American Book Company sued George Doan, a used bookseller.¹⁵ Doan acquired “soiled and torn” used children’s books, some with damaged or missing covers.¹⁶ To prepare them for resale, Doan repaired the books, in some cases reproducing missing covers in exact similitude” of the originals.¹⁷ The American Book Company alleged copyright infringement, but the Court of Appeals for the Seventh Circuit rejected the claim. As the owner of the books, Doan enjoyed a “right of repair or renewal” that allowed him to replace missing components and fashion new ones, even if they were exact imitation[s] of the original.”¹⁸ According to the court, the right of ownership in the book carries with it and includes the right to maintain the book as nearly as possible in its original condition.”¹⁹ To deny that right

¹² Id. at 542 (internal citations omitted).

¹³ 17 U.S.C. § 109(c).

¹⁴ Id. § 117.

¹⁵ *Doan v. American Book Co.*, 105 F. 772 (7th Cir. 1901).

¹⁶ Id. at 777.

¹⁷ Id. at 778.

¹⁸ Id. at 776.

¹⁹ Id. at 777.

would have been intolerable and odious.”²⁰ The right to repair, in short, is an inherent feature of ownership.

Nearly a century later, Congress acknowledged repair as a right owners enjoy regardless of copyright restrictions when it rejected the outcome of a case decided by the Ninth Circuit. In that case, MAI Systems, a company that made computers and software, successfully sued Peak, an independent service provider that repaired MAI devices, for copyright infringement.²¹ The court agreed with MAI that by merely powering up one of its machines, Peak created unlawful copies of MAI’s software in the device’s RAM.²² In response to this flawed holding, Congress enacted § 117(c) of the Copyright Act, which explicitly permits owners or lessees of machines to make—or to authorize providers to make—copies of computer programs in the course of maintenance or repair.²³ Since then, the U.S. Copyright Office has acknowledged that diagnosis, repair, and maintenance activities are “generally noninfringing” under § 117 and fair uses.²⁴

Patent law has its own long history of embracing repair as an inherent right of owners of patented devices. Under the patent exhaustion doctrine, the sale of a patented article ends the patentee’s control over its sale, use, or repair. This fundamental limitation on the scope of a patentee’s rights dates back to the mid-1800s. As the Court then understood, when the machine passes to the hands of the purchaser, it is no longer within the limits of the monopoly. It passes outside of it, and is no longer under the protection of the act of Congress . . . [and] becomes [the owner’s] private, individual property.”²⁵ And just a few years ago, the Court reaffirmed in *Impression Products v. Lexmark* that “once a patentee sells an item . . . the patent laws provide no basis for restraining the use and enjoyment of

²⁰ *Id.*; see also *Bureau of National Literature v. Sells*, 211 F. 379, 380 (W.D. Wash. 1914).

²¹ *MAI Sys. Corp. v. Peak Computer Inc.*, 991 F.2d 511 (9th Cir. 1993).

²² The Ninth Circuit tersely concluded in a footnote that “[s]ince MAI licensed its software, the Peak customers do not qualify as owners of the software.” *Id.* at 519, n5. *But see* *Cartoon Network v. CSC Holdings, Inc.*, 536 F.3d 121, 130 (2d Cir. 2008) (holding temporary buffer copies are not “copies” under the Copyright Act).

²³ 17 U.S.C. § 117(c).

²⁴ See Register of Copyrights, *Section 1201 Rulemaking: Eight Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Recommendation of the Register of Copyrights* (2021) (noting that “diagnosis, maintenance, and repair of software-enabled consumer devices are likely to be fair uses where the purpose is to restore device functionality”); U.S. Copyright Office, *Software-Enabled Consumer Products* 35 (2016) (“Properly construed, section 117 should adequately protect most repair and maintenance activities”) (internal quotations omitted).

²⁵ *Bloomer v. McQuewan*, 55 U.S. (14 How.) 539 (1852).

the product. Allowing further restrictions would run afoul of the ‘common law’s refusal to permit restraints on the alienation of chattels.’”²⁶ To illustrate the practical importance of that rule, the Court turned to an example drawn from the auto repair industry:

Take a shop that restores and sells used cars. The business works because the shop can rest assured that, so long as those bringing in the cars own them, the shop is free to repair and resell those vehicles. That smooth flow of commerce would sputter if companies that make the thousands of parts that go into a vehicle could keep their patent rights after the first sale. Those companies might, for instance, restrict resale rights and sue the shop owner for patent infringement. And even if they refrained from imposing such restrictions, the very threat of patent liability would force the shop to invest in efforts to protect itself from hidden lawsuits. Either way, extending the patent rights beyond the first sale would clog the channels of commerce, with little benefit from the extra control that the patentees retain.²⁷

As early as 1850, the Court recognized that repair of a patented machine was a legally privileged act of “restoration” that reflected no more than the exercise of that right of care which everyone may use to give duration to that which he owns.”²⁸ A century later, the Court underscored this principle when it held that the replacement of the fabric cover of a convertible car roof was lawful as a matter of patent exhaustion.²⁹ As the Court explained, the mere replacement of individual unpatented parts, one at a time, whether of the same part repeatedly or different parts successively, is no more than the lawful right of the owner to repair his property.”³⁰

Like copyright and patent law, trademark law also recognizes the principle of exhaustion and facilitates the repair of goods. Once a product bearing a trademark is sold, the mark owner’s ability to control post-sale use and transfer is severely limited.³¹ Not only can the owner of a trademarked good resell it, but they can also repair it. In a case brought by Champion in 1947, the Supreme Court held that so long as reconditioned spark plugs

²⁶ *Impression Prod., Inc. v. Lexmark Int’l, Inc.*, 137 S. Ct. 1523 (quoting *Kirtsaeng*, 568 U.S. at 538)

²⁷ *Id.* at 1532.

²⁸ *Wilson v. Simpson*, 50 U.S. 109 (1850).

²⁹ *Aro Mfg. Co., Inc. v. Convertible Top Co.*, 365 US 336 (1961).

³⁰ *Id.* at 346.

³¹ *Sebastian Int’l, Inc. v. Longs Drug Stores Corp.*, 53 F.3d 1073, 1074 (9th Cir. 1995) (the right to control distribution of its trademarked product does not extend beyond the first sale of the product”).

were labeled as “repaired,” the reseller had no obligation to remove the Champion mark.³² More recently, courts have endorsed the right of refurbishers to reapply trademarked logos to products before reselling them, on the condition that they were accurately labeled.³³

Taken together, these longstanding legal rules support the notion that a right to repair one’s personal property is an inherent incident of ownership. These doctrines are meant to secure the rights of property owners to repair the things they own as they see fit, free from restrictions imposed by manufacturers, retailers, or IP rights holders. But while personal and intellectual property law have been consistently hostile to such efforts, changes in product design have afforded manufacturers greater power to impose their will on consumers.

As modern devices increasingly incorporate software code, network connectivity, and data-generating sensors, they provide manufacturers with new opportunities to shape, restrict, and interfere with consumers’ control over the products they own.³⁴ Today, devices from kitchen appliances to vehicles are effectively tethered to their manufacturers long after they’ve been sold to consumers.³⁵ These tethers can have benefits. They enable software updates that can improve security or add new features. But they can also strip away functionality, introduce vulnerabilities, and interfere with independent repair.³⁶

³² *Champion Spark Plug Co. v. Sanders*, 331 U.S. 125 (1947).

³³ *Nitro Leisure Prod., L.L.C. v. Acushnet Co.*, 341 F.3d 1356, 1357 (Fed. Cir. 2003).

³⁴ See generally Chris Jay Hoofnagle, Aniket Kesari & Aaron Perzanowski, *The Tethered Economy*, 87 *Geo. Wash. L. Rev.* 783 (2019).

³⁵ Jonathan Zittrain, *The Future of the Internet and How to Stop It* (2008) (“Tethered appliances belong to a new class of technology. They are appliances in that they are easy to use, while not easy to tinker with. They are tethered because it is easy for their vendors to change them from afar, long after the devices have left warehouses and showrooms.”).

³⁶ See Hoofnagle, Kesari & Perzanowski, *supra* note 34. Tethers can also be used to meter an owner’s access to built-in capabilities. Greg Fink, *BMW to Treat Apple CarPlay as a Subscription Service and Charge Customers an Annual Fee*, *Car & Driver*, Jan. 22, 2018, <https://www.caranddriver.com/news/bmw-to-treat-apple-carplay-as-a-subscription-service-and-charge-customers-an-annual-fee>; Jordan Golson, *The Refreshed Tesla Model S 70 Lets You Pay to ‘Unlock’ a Bigger Battery*, *Verge*, May 5, 2016, <https://www.theverge.com/2016/5/5/11597508/tesla-model-s-70-battery-upgrade-pay-unlock-battery>; James Vincent, *BMW Starts Selling Heated Seat Subscriptions for \$18 a Month*, *Verge*, July 12, 2022,

If the functionality of a device—like a vehicle—depends on software, manufacturers can use that code to impose any number of restrictions on whether, how, and by whom that functionality can be restored. Likewise, access to performance and diagnostic data generated by a device is often necessary for repairs. But when that data is communicated through encrypted channels accessible only by the manufacturer, repair becomes more difficult, if not impossible, for independent providers. By denying consumers and independent providers access to vehicle data, whether stored on-board or transmitted over a wireless network, manufacturers can limit competition in repair markets and reduce owners’ control over their property. In short, these digital tethers enable a degree of control over post-sale consumer behavior, including repair, that the law has traditionally not countenanced. This trend represents a major shift in the relationship between consumers and the vehicles they own.

Auto Repair in the United States

For more than a century, automobile repair in the United States has been characterized by consumer choice, robust competition, reasonable prices, and reliable quality. That’s been true since the auto industry’s earliest days. Beginning with the Ford Model T, carmakers and consumers both understood that accessible and affordable repairs increase the value of vehicles in the long run. Recognizing the necessity and value of repair, every Model T included a toolkit and a straightforward repair manual detailing the procedures for basic fixes.³⁷ As Henry Ford himself explained:

We cannot conceive how to serve the consumer unless we make for him something that, as far as we can provide, will last forever It does not please us to have a buyer’s car wear out or become obsolete. We want the man who buys one of our products never to have to buy another. We never make an improvement that renders any previous model obsolete. The parts of a specific model are not only interchangeable with all other cars of that model, but they are interchangeable with similar parts on all the cars that we have turned out.³⁸

<https://www.theverge.com/2022/7/12/23204950/bmw-subscriptions-microtransactions-heated-seats-feature>.

³⁷ James P. Womack, Daniel T. Jones & Daniel Roos, *The Machine that Changed the World* (1990); Royce Peterson, *The 1911 Model T Ford Tool Kit*, Model T Ford Fix, Jan. 14, 2018, <https://modeltfordfix.com/the-1911-model-t-ford-tool-kit/>.

³⁸ Henry Ford & Samuel Crowther, *My Life and Work* (1922).

While car owners today don't expect their vehicles to last forever, they remain durable investments. In an era of diminishing product lifespans, cars are a notable exception.³⁹ In 2021, the average age of a vehicle on the road in the United States was just over twelve years.⁴⁰ That figure has climbed 2.5 years over the past two decades. Not surprisingly, Americans buy twice as many used cars each year as they do new ones.⁴¹

The growing lifespan of the average automobile is the result of a number of factors. Advances in engineering, material science, and manufacturing—spurred by increased global competition and higher regulatory standards—play significant roles. But repair is a crucial component of vehicle durability. Without accessible, affordable, and reliable repair, vehicle lifespans would suffer considerably—a loss that could cost American consumers hundreds of billions of dollars annually.⁴²

³⁹ A range of studies support the proposition that product lifespans for home appliances and electronics have grown shorter over time. See, e.g., Harald Wieser, Nina Troger & Renate Hubner, *The Consumers Desired and Expected Product Lifetimes*, PLATE (2015); Tim Cooper, *Inadequate Life? Evidence of Consumer Attitudes to Product Obsolescence*, 27 *Journal of Consumer Policy* 421 (2004); Harald Wieser, *Beyond Planned Obsolescence: Product Lifespans and the Challenges to a Circular Economy*, 25 *GAIA Ecological Perspectives for Science and Society* 156 (2016); Yuliya Kalmykova, Joao Patricio, Leonardo Rosado & Per E. O. Berg, *Out with the Old, Out with the New: The Effect of Transitions in TVs and Monitors Technology on Consumption and WEEE Generation in Sweden 1996–2014*, 46 *Waste Management* 511 (2015).

⁴⁰ Robert Ferris, *Cars on American Roads Keep Getting Older*, CNBC, Sept. 28, 2021, <https://www.cnbc.com/2021/09/28/cars-on-american-roads-keep-getting-older.html>.

⁴¹ US Department of Energy, *Used Vehicle Sales Are More than Double the Number of New Vehicle Sales*, July 15, 2019, <https://www.energy.gov/eere/vehicles/articles/fotw-1090-july-15-2019-used-vehicle-sales-are-more-double-number-new-vehicle>.

⁴² The roughly 40 million used cars sold each year in the United States represent a savings of nearly \$800 billion compared to new car purchases. On average, a new car in the United States costs more than \$47,000, nearly \$20,000 more than the typical used car. Sebastian Blanco, *New Car Price Keeps Climbing, with Average Now at Almost \$47,100*, Car and Driver, Jan.12, 2022, <https://www.caranddriver.com/news/a38748092/new-car-average-sale-prices-47100>; Sean Tucker, *Average Used Car Price Eased in May*, Kelley Blue Book, June 17, 2022, <https://www.kbb.com/car-news/average-used-car-price-dropped-in-may>. This cost differential accounts for the skyrocketing prices for used cars during the pandemic, which increased from about \$17,500 in December of 2019 to over \$25,000 two years later. Jane Ulitskaya, *When Will Used-Car Prices Drop? 3 Things Car Shoppers Should Know*, Cars.com,

The \$60-billion auto repair industry represents the largest market for the repair of consumer goods in the United States.⁴³ The auto repair market is a competitive one, with roughly 70% of parts and service supplied by independent providers.⁴⁴ Franchised auto dealers, who have contractual relationships with car manufacturers, make up the remaining 30%.⁴⁵ Consumers are twice as likely to take their vehicle to independent repair shops, with only 35% preferring dealerships.⁴⁶ Cost is a major factor in that choice. Compared to independent repair shops, dealerships charge consumers 36% more for repairs.⁴⁷

Given the durability of the U.S. auto fleet, cost is an especially salient issue for consumers. The average vehicle on the road in the United States is more than 12 years old, but the typical new car warranty expires after just three years or 36,000 miles.⁴⁸ Since the overwhelming majority of vehicles are no longer covered by a manufacturer warranty, competition and the reduced costs it creates are all the more important to vehicle owners.

The availability of repair is also key to maintaining the resale value of vehicles. Obviously, a car that doesn't run is worth much less than one in proper working order, all things being equal. But access to affordable repair services boosts the value of vehicles across the board. A car with significant mechanical issues still has value if buyers are

Feb. 3, 2022, <https://www.cars.com/articles/when-will-used-car-prices-drop-3-things-car-shoppers-should-know-446525>.

⁴³ See Mordor Intelligence, *United States Automotive Service Market - Growth, Trends, Covid-19 Impact, And Forecast (2022 - 2027)*, <https://www.mordorintelligence.com/industry-reports/united-states-automotive-service-market>; IBIS World, *Auto Mechanics in the US - Market Size 2003–2028*, July 29, 2022, <https://www.ibisworld.com/industry-statistics/market-size/auto-mechanics-united-states>.

⁴⁴ *Choice and Savings Crucial for Consumers in Post-Collision Repair Process*, CAR Coalition, <https://carcoalition.com/wp-content/uploads/2020/07/04CHOICE-AND-SAVINGS-CRUCIAL-FOR-CONSUMERS-IN-POST-COLLISION-REPAIR-PROCESS-.pdf>

⁴⁵ *Id.*

⁴⁶ See Cox Automotive, *2021 Service Industry Study Executive Summary* (2021), <https://www.coxautoinc.com/wp-content/uploads/2021/10/2021-Service-Industry-Study-Executive-Summary.pdf>; *CAR Coalition and YouGov Consumer Survey*, March 2021, <https://carcoalition.com/wp-content/uploads/2020/07/Survey-Results.pdf> (reporting that 27% of consumers would take their vehicle to a dealer after a collision, while 54% preferred an independent shop).

⁴⁷ Lang Marketing, *Massachusetts Vehicle Repair Cost Study*, October 20, 2020.

⁴⁸ *Factory Warranty: Everything You Need to Know*, Car and Driver, <https://www.caranddriver.com/research/a31608083/factory-warranty>.

confident that they can repair it at a reasonable cost. And even if a vehicle appears to be in working order, the ability to fix it should something go wrong in the future is built into its value on the secondary market. The easier and cheaper it is to repair a used car, the better an investment it makes.⁴⁹

Despite the long history and economic importance of independent auto repair in the United States, manufacturers and dealers have taken steps in recent decades to restrict the availability of repair. Repair parts and service already account for nearly half of dealer profits in the United States, more than either new or used vehicle sales.⁵⁰ Rather than compete with independent shops for this lucrative market, dealers would prefer to capture the considerable economic value of repair markets for themselves. By controlling the market for repair services, not only can dealers claim an increasing share of the tens of billions of dollars consumers spend each year on auto repair, but they can also increase their profits by charging higher prices for repair services. At the same time, more expensive repairs tend to boost sales of new products by reducing the cost savings of repair.⁵¹

Repair Restrictions & the Early Legislative Response

Manufacturers and dealers employ a number of strategies to maximize profits in repair markets. One tactic they have increasingly relied on in recent years is obtaining design patents on vehicle components.⁵² Design patented headlight assemblies, fenders, and other components allow firms to reduce, if not eliminate, competition from third-party sellers of aftermarket parts. As a result, firms like General Motors boast profit margins of

⁴⁹ In the 1960s, for example, the massive popularity of the Volkswagen Beetle was due, in part, to its ease of repair. Daniela K. Rosner & Morgan Ames, *Designing for Repair? Infrastructures and Materialities of Breakdown*, Proceedings of Seventeenth ACM Conference on Computer-Supported Cooperative Work and Social Computing 319 (2014).

⁵⁰ *Where Does the Car Dealer Make Money?*, Edmunds, June 13, 2019, www.edmunds.com/car-buying/where-does-the-car-dealer-make-money.html.

⁵¹ See Aaron Perzanowski, *The Right to Repair* 74-6 (2022).

⁵² *Id.*; see also Joshua D. Sarnoff, *White Paper on Protecting the Consumer Patent Law Right of Repair and the Aftermarket for Exterior Motor Vehicle Repair Parts: The PARTS Act, S. 812, H.R. 1879, 115th Congress 1*, 13–14 (2017). The Save Money on Auto Repair Transportation Act (SMART) Act, H.R.3664, was introduced in the 117th Congress to address this problem.

more than 30 percent on aftermarket parts.⁵³ This trend helps explain why, according to the United States Bureau of Labor Statistics, the price of vehicle repair increased by more than 60 percent from 2000 to 2017.⁵⁴

But design patents are far from the only tactic that hampers independent repair. The integration of software code, the digitization of vehicle functionality, and the collection and sequestration of vehicle data have provided manufacturers and dealers new opportunities to exert control over repair markets.

As early as 1990, manufacturers and dealers recognized the potential control over repair markets offered by digital components and data. As part of the Clean Air Act Amendments of 1990, Congress considered requiring on-board diagnostic (OBD) systems to help identify and repair problems with vehicles' emissions control systems.⁵⁵ Manufacturers resisted standardization of these OBD systems, preferring to allow each manufacturer to create its own proprietary tool for accessing data from the OBD system. Such an approach would have forced independent repair shops to purchase expensive tools for each make of vehicle, imposing significant costs and reducing competition in the market for servicing and repairing components that affected vehicle emissions.

Eventually, Congress did mandate OBD systems capable of alerting vehicle owners of needed maintenance and repairs of emission-related components, "storing and retrieving fault codes," and "providing access to stored information."⁵⁶ But in response to concerns raised by independent repair providers, Congress imposed three requirements essential to ensuring a competitive market for repair. First, it insisted on "standard and uniform" connectors for accessing information "for inspection, diagnosis, service, or repair."⁵⁷ Second, access to the OBD system must be "unrestricted and shall not require any access code" or other tool supplied by the manufacturer.⁵⁸ And third, the data obtained from the OBD system must be "usable without the need for any unique decoding information or

⁵³ Melissa Burden, *Parts, Service and Accessories Boost Ford, FCA, GM Revenue*, Detroit News, Mar. 23, 2017, www.detroitnews.com/story/business/autos/general-motors/2017/03/23/parts-accessories-boost-ford-fca-gm-revenue/99562692.

⁵⁴ Jim Gorzelany, *Soaring Cost of Parts Means Your Car Is More Likely to Be Totaled in an Accident*, Forbes, Feb. 15, 2018, www.forbes.com/sites/jimgorzelany/2018/02/15/the-sum-not-the-whole-is-greater-when-it-comes-to-the-skyrocketing-cost-of-car-parts.

⁵⁵ 42 U.S.C. § 7521(m).

⁵⁶ 42 U.S.C. § 7521.

⁵⁷ *Id.*

⁵⁸ *Id.*

device.”⁵⁹ Those three restrictions prevented carmakers from imposing unnecessary barriers to independent repair.

But Congress went even further. It insisted that manufacturers provide “any person engaged in the repairing or servicing of motor vehicles” with “any and all information” necessary to use the OBD system, including “instructions for making emission-related diagnoses and repairs.”⁶⁰ Even if manufacturers claim such information is a trade secret, they are nonetheless expected to share it so long as it is made available to their franchised dealers.⁶¹

When the Environmental Protection Agency eventually issued regulations under the law, it required that OBD systems conform to a set of industry standards. It also mandated that those systems be compatible with standard handheld diagnostic tools, making it even easier for independent repair shops to access information across the full line of compliant vehicles.⁶²

Over time, the use of software code and on-board computing spread from emissions systems to the full range of vehicle functionality. Some manufacturers recognized this an opportunity to design vehicles that were more difficult for independent providers to repair. Diagnostic information generated by these systems was sometimes difficult or expensive to access, and in some cases it was simply unavailable to anyone beyond the manufacturer or their dealers.

Equally troublingly, onboard computers gave manufacturers control over which replacement parts could be installed in the vehicles they sold to consumers. Without access to initialization software that was only made available to dealers, independent providers were unable to successfully complete fixes as simple as replacing a windshield-wiper switch.⁶³ Without authorization from that software, a car’s computer could prevent properly installed, authentic parts from working.

In response to these restrictions on repair, Congress again considered legislative intervention. In 2001, Senator Paul Wellstone and Representatives Joe Barton and Edolphus Towns introduced the Motor Vehicle Owners’ Right to Repair Act.⁶⁴ The bill

⁵⁹ Id.

⁶⁰ Id.

⁶¹ Id.

⁶² 60 Fed. Reg. 40474.

⁶³ Angus Loten, *Mechanics Seek Out Right to Repair*, Wall Street Journal, Feb. 10, 2011, www.wsj.com/articles/SB10001424052748703555804576102272750344178.

⁶⁴ S. 2617, 107th Congress; H.R. 2735, 107th Congress.

died in committee, but was reintroduced in subsequent Congresses, most recently in 2011, where it met the same fate.⁶⁵

The following year, legislative efforts shifted from the federal to the state level. Massachusetts eventually enacted a law that requires manufacturers of motor vehicles to make available for purchase by owners ... and by independent repair facilities the same diagnostic and repair information” as well as all diagnostic repair tools” made available to dealers, on fair and reasonable terms.”⁶⁶ Carmakers must also provide access to their onboard diagnostic and repair information system ... using an off-the-shelf personal computer” beginning with 2018 model year vehicles.⁶⁷ Although the bill passed in July of 2012, a ballot initiative enacting similar right-to-repair obligations was already slated for the November election. Massachusetts voters overwhelmingly supported the initiative, with 86 percent voting in favor.⁶⁸

The Massachusetts auto repair law was soon adopted as a de facto national standard. In January of 2014, industry associations representing carmakers and providers of aftermarket parts and service entered into a nationwide Memorandum of Understanding (MOU). Under the MOU, manufacturers agreed to operate under the terms of the Massachusetts legislation across all fifty states and the District of Columbia.⁶⁹ In

⁶⁵ Motor Vehicle Owners' Right to Repair Act of 2003, H.R. 2735 108th Congress; Motor Vehicle Owners Right to Repair Act of 2005, H.R. 2048, 109th Congress; Motor Vehicle Owners Right to Repair Act of 2007, H.R.2694 110th Congress; Motor Vehicle Owners Right to Repair Act of 2011, H.R.1449, 112th Congress.

⁶⁶ H. 4362, 187th Gen. Ct. (Mass. 2012).

⁶⁷ Id.

⁶⁸ Question 1, Mass. Election Statistics, https://electionstats.state.ma.us/ballot_questions/view/6811. To reconcile disparities between the ballot initiative and the House bill, another bill was passed in 2013. H. 3757, 188th Gen. Ct. (Mass. 2013).

⁶⁹ Memorandum of Understanding Among Kathleen Schmatz, President & CEO, Auto. Aftermarket Indus. Ass'n, Ray Pohlman, President, Coal. for Auto Repair Equal., Mitch Bainwol, President & CEO, All. Auto. Mfrs., and Michael Stanton, President & CEO, Ass'n Glob. Automakers (Jan. 15, 2014), www.nastf.org/files/public/OtherReference/MOU_SIGNED_1_15_14.pdf (hereinafter “MOU”). Specifically, the MOU called on manufacturers to make diagnostic and repair information available for purchase to vehicle owners and independent repair providers beginning with model year 2002 vehicles. Id. Second, it required manufacturers to allow vehicle owners and independent repair shops to purchase the same diagnostic tools offered to their dealers. Id. For model

exchange, the organization representing aftermarket providers agreed not to pursue additional repair legislation until 2019.⁷⁰ While the MOU was an important win for consumers and independent repair, it does not operate with the force of law. The MOU does not bind nonparties, and alleged violations are evaluated by a dispute resolution panel composed of members of the various trade associations and a mediator.⁷¹

The MOU, while far from perfect, largely succeeded in restoring the status quo of a competitive auto repair market that offered independent providers a reasonable opportunity to serve consumers at fair prices. In doing so, it protected consumer choice, lowered costs, and improved quality in the auto repair market. As the Federal Trade Commission noted in its 2021 “Nixing the Fix” report, the MOU resulted in “a broad, if not complete, right to repair in the automotive industry across the United States.”⁷² But as the next section details, the MOU was not future-proof. The introduction of new strategies and technologies by manufacturers meant that this negotiated solution was necessarily a temporary one.

Ongoing Threats to Independent Repair and Consumer Choice

Despite the important protections for consumer choice and competition reflected in the 2013 Massachusetts law and the resulting MOU, a number of significant concerns remain.

First, there is no requirement for vehicle manufacturers to provide access to non-emissions data under federal law. While the Clean Air Act and related regulations require standardized access to emissions-related data, federal law is silent as to consumers’ and independent repair providers’ rights to access diagnostic information, fault codes, or other vehicle data, whether through the OBD system or otherwise. Moreover, electric vehicles, which have experienced a steep increase in market share, do not produce emissions and are thus eligible for waivers from the Clean Air Act’s OBD rules.⁷³ Some, like certain Tesla models, do not ship with standard OBD ports at all.

year 2018, manufacturers promised to make software updates available at a reasonable via daily, monthly, or yearly subscriptions to an internet-based system. Id.

⁷⁰ Id.

⁷¹ Id. See also Adrian Ma, *Your Car Talks to the Manufacturer. Advocates Want It to Talk to You, Too*, WBUR, Aug. 6, 2019, www.wbur.org/bostonmix/2019/08/06/right-to-repair-ballot-measure.

⁷² Federal Trade Commission, *Nixing the Fix: An FTC Report to Congress on Repair Restrictions* (2021), www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf.

⁷³ 40 CFR § 86.1806-17.

Second, the voluntary safeguards in the MOU are limited in crucial respects. They require manufacturers to provide vehicle owners and independent repair providers with the same information and tools made available to their own dealers. But some carmakers have moved to direct sales models, eliminating traditional dealers altogether, along with their obligation to independent repair providers.⁷⁴ Some of those same manufacturers, like Tesla, are not signatories to the MOU and are thus not bound by its terms in any case.⁷⁵

Third, the emergence of telematics systems offers manufacturers a new set of tools to restrict access to repair information and stymie independent repair providers. Vehicles today increasingly incorporate telematics systems, which allow diagnostic and other vehicle data to be collected and wirelessly transmitted to manufacturers and dealers, bypassing the OBD system on which independent repair providers rely.⁷⁶ By funneling diagnostic and repair information away from the standard OBD system to unstandardized and closed telematics systems, manufacturers give their franchised dealers a significant competitive advantage over independent repair providers, which reduces consumer choice and increases prices.

When the 2013 Massachusetts law was enacted and the MOU was signed, vehicle telematics systems were in their early stages and few vehicles were equipped with the technology. In light of manufacturer opposition, telematics systems were largely excluded from the scope of both the Massachusetts law and the MOU that adopted it.⁷⁷ But in the years that followed, manufacturers began to more aggressively deploy telematics systems in their vehicles. Today they are commonplace, with more than 60% of new cars featuring telematics systems worldwide.⁷⁸ By one estimate, 95% of new vehicles will include this form of connectivity by 2030.⁷⁹

⁷⁴ See Daniel A. Crane, *Reforming Michigan Vehicle Direct Sales Laws*, Cato Institute, 2021, <https://www.cato.org/regulation/summer-2021/reforming-michigan-vehicle-direct-sales-laws>.

⁷⁵ See MOU.

⁷⁶ See Leah Chan Grinvald & Ofer Tur-Sinai, *Smart Cars, Telematics and Repair*, 54 *University of Michigan J. L. Reform* (2021); Maddie Stone, *Want to Fix Your Own Tesla? Massachusetts Just Made It Easier*, *Grist*, Nov. 23, 2020, <https://grist.org/politics/tesla-want-to-fix-your-own-massachusetts-just-made-it-easier>.

⁷⁷ MOU § 2(e).

⁷⁸ *The Global Automotive OEM Telematics Market - 7th Edition*, Research and Markets (2021).

⁷⁹ Michele Bertoncetto, Christopher Martens, Timo Möller, and Tobias Schneiderbauer, *Unlocking the Full Life-Cycle Value from Connected-Car Data*, McKinsey, Feb. 11, 2021,

Under the 2013 Massachusetts law and the MOU, manufacturers are required to provide access to telematics repair and diagnostic information only if that data is provided to dealers, necessary for diagnosis and repair, and otherwise unavailable to independent repair providers.⁸⁰ But the MOU does not specify the terms, conditions, and restrictions under which qualifying telematics information is to be made available. Increasingly cars are designed to route diagnostic and repair information through telematics systems rather than the OBD system.⁸¹ So by shifting the flow of information away from the industry-standard OBD system to a carmaker's own telematics system, manufacturers wield far greater control over the availability of necessary repair information.⁸²

Telematics systems and the interfaces for accessing them are not standardized. They are typically integrated into vehicle infotainment systems and vary across manufacturers and models.⁸³ Unlike the OBD system, telematics systems require independent providers to navigate a maze of non-interoperable interfaces. Moreover, access to repair and diagnostic information generated through telematics systems is typically subject to encryption and other technological protection measures, which restrict access to repair information, unlike the open OBD protocol.⁸⁴ Taken together, these changes mean that accessing necessary information through telematics systems is more difficult and less cost effective for independent providers.

Telematics systems offer dealers two more competitive advantages over independent repair providers. Because dealers are supplied with real-time access to vehicle performance and diagnostic information, they can identify existing and potential faults

<https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/unlocking-the-full-life-cycle-value-from-connected-car-data>

⁸⁰ MOU § 2(e).

⁸¹ Register of Copyrights, *Section 1201 Rulemaking: Seventh Triennial Proceeding to Determine Exemptions to the Prohibition on Circumvention, Introduction and Recommended Regulatory Language of the Acting Register of Copyrights* 65 (2018) ("The OBD port does not provide all the same information that happens over the telematics data feed. It used to be that was where you got all the information. Increasingly, there s less and less available on those OBD ports.").

⁸² See Sarah Kessler, *The Connected Car of the Future Could Kill Off the Local Auto Repair Shop*, Quartz, Sept. 5, 2017, <https://qz.com/1054261/the-connected-car-of-the-future- could-kill-off-the-local-auto-repair-shop>

⁸³ Grinvald & Tur-Sinai, *supra* note 76.

⁸⁴ *Id.*; see also *Ford Motor Co. v. Autel US Inc.*, No. 14-13760, 2015 WL 5729067, at *7–8 (E.D. Mich. Sept. 30, 2015) (Ford alleged that Autel circumvented its security measures to access data without authorization).

without the consumer ever bringing their car into the shop. Independent providers, on the other hand, are typically only able to diagnose and repair a problem once it disrupts the driving experience and the consumer delivers the vehicle to them. The lack of access to real-time data interferes with independent repair shops' ability to proactively alert consumers of maintenance that could prevent breakdowns or other more expensive damage. Instead, consumers who want to take advantage of telematics data are forced to pay for the more expensive services offered by dealerships.

Relatedly, telematics systems give dealers a direct line of communication to consumers while they are behind the wheel. If a problem arises or a collision occurs, telematics systems can recommend the nearest dealer for repairs, put drivers in touch with the dealer at the push of a button, or even offer drivers turn-by-turn directions to the dealer. This ability to steer consumers, both figuratively and perhaps literally, to the dealer after they've experienced or been alerted to a problem with their vehicle gives dealers a considerable advantage over independent repair shops.⁸⁵

The 2020 Massachusetts Right to Repair Law

In light of these developments, Massachusetts considered another automotive-repair measure in 2020. In opposition, carmakers launched a \$25 million dollar campaign, which featured a highly misleading television ad that claimed if the measure passed, a sexual predator could use the data to stalk their victims."⁸⁶ Nonetheless, on November 3, 2020, Massachusetts voters overwhelmingly approved Ballot Question 1, "An Initiative Law to Enhance, Update and Protect the 2013 Motor Vehicle Right to Repair Law."⁸⁷

The 2020 law amends the existing Massachusetts auto repair regime to give vehicle owners and their designated independent repair providers greater access to repair information collected and transmitted by their vehicles. First, it specifies that not only must manufacturers provide access to vehicles' onboard diagnostic and repair

⁸⁵ See FTC, *Nixing the Fix*, *supra* note 72; Grinvald & Tur-Sinai, *supra* note 76 (arguing that some communications to drivers may constitute unfair or deceptive acts and practices).

⁸⁶ Matthew Gault, *Auto Industry Has Spent \$25 Million Lobbying against Right to Repair Ballot Measure*, Vice, Sept. 29, 2020, www.vice.com/en/article/z3ead3/auto-industry-has-spent-dollar25-million-lobbying-against-right-to-repair-ballot-measure; Matthew Gault, *Auto Industry TV Ads Claim Right to Repair Benefits Sexual Predators*, Vice, Sept. 1, 2020, www.vice.com/en/article/qj4ayw/auto-industry-tv-ads-claim-right-to-repair-benefits-sexual-predators.

⁸⁷ Callum Borchers, *Mass. Voters Say "Yes" On Question 1, Expanding Access to Car Repair Data*, WBUR, Nov. 3, 2020, www.wbur.org/news/2020/11/03/ballot-question-1-right-to-repair-passes.

information systems, but that such access must be standardized and cannot require prior manufacturer authorization.⁸⁸ The law provides an exception if manufacturers agree to an authorization system that is standardized across all makes and models and administered by an independent entity.⁸⁹

Second, the law eliminates the 2013 exception for telematics data, replacing it with a new provision that enables owners and independent repair facilities to access to mechanical information via telematics systems. Starting with the 2022 model year, it requires manufacturers to equip vehicles with an “inter-operable, standardized and open access platform” which “shall be capable of securely communicating” mechanical data from the vehicle “via direct data connection to the platform.”⁹⁰ Consumers will be able to access this platform directly by way of a mobile application and can authorize repair providers to access it for specified periods of time.⁹¹

The law also outlines a process for creating a standard notice for consumers explaining the use of telematics data that dealers must provide before the purchase of a vehicle.⁹² And finally, it creates a civil enforcement remedy for any violations of the above provisions.⁹³ After a highly publicized and closely watched campaign, the initiative was adopted with 75% support from Massachusetts voters.

Shortly after the measure passed, the Alliance for Automotive Innovation (AAI), an industry lobbying group, filed a lawsuit in federal court to prevent enforcement of the new law. In its lawsuit, AAI argues that the new Massachusetts repair provisions are preempted by various sources of federal law, including the National Traffic and Motor Vehicle Safety Act and the Clean Air Act, among others.⁹⁴ Attorney General Healey has vigorously defended the new law. A bench trial was held before Judge Woodlock of the U.S. District Court for the District of Massachusetts in June of 2021, but as of September 1, 2022, the court has not yet issued a decision.

The REPAIR Act Preserves & Encourages Competition

⁸⁸ See MGL c.93K § 2(d).

⁸⁹ Id.

⁹⁰ Id. § 2(f)

⁹¹ Id.

⁹² Id. § 2(g).

⁹³ Id. § 6.

⁹⁴ AAI also insists that the 2020 Massachusetts law constitutes an unlawful taking of manufacturers’ property interests.

Regardless of the ultimate outcome of the AAI's lawsuit, the need for federal legislation recognizing and reinforcing consumers' right to repair their vehicles is clear. The challenges facing consumers and repair providers are hardly unique to Massachusetts. They arise in every state across the country. Given the interstate nature of commerce and transportation, the right to repair vehicles is a fundamentally nationwide concern. And it is one that would benefit greatly from national uniformity. The rights of the nearly 240 million drivers in the United States to choose who repairs their vehicles should not depend on the state in which they happen to live.

H.R. 6570, the Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, although it would not eliminate every barrier to vehicle repair, would substantially empower consumers and enable independent providers to compete on a more level playing field against franchised car dealerships. The REPAIR Act would facilitate access to vehicle data, repair information, and tools. In essence, it would enshrine in federal law the consumer rights adopted overwhelmingly by Massachusetts voters in 2013 and again in 2020, while adding important ongoing oversight by industry and agency experts. In keeping with the century-old tradition of U.S. auto repair and Congress's commitment to competition as reflected in the Clean Air Act amendments, the REPAIR Act would eliminate manufacturer restrictions on vehicle data and require direct, wireless access to telematics information through a standardized platform. Current industry practice gives manufacturers exclusive control over such information. Under the REPAIR Act, access to vehicle data and repair information would be in the hands of vehicle owners who could then designate repair providers that would be permitted to access that information to perform repair and maintenance services.

At the core of the REPAIR Act are a set of prohibitions and requirements that constrain the behavior of carmakers. Under the terms of the bill, vehicle manufacturers are not permitted to deploy technological barriers, legal waivers, or other measures identified by the FTC to impair the ability of a vehicle owner or their designee to access data generated by a vehicle, or to "diagnose, repair, and maintain" a vehicle in the same way as manufacturers and their dealers.⁹⁵ Likewise, it would prohibit interference with the right of vehicle owners, repair facilities, or aftermarket parts and equipment makers to access repair information and tools. Nor could manufacturers use such tactics to prevent parts and equipment makers from making and selling aftermarket parts.⁹⁶

The REPAIR ACT also imposes a set of affirmative obligations on vehicle manufacturers. As of the law's effective date, they must provide access to vehicle-generated data to

⁹⁵ H.R. 6570 § 3(a)(1).

⁹⁶ *Id.*

vehicle owners and their designees “without restriction or limitations,” including fees, license terms or required decryption technologies.⁹⁷ Second, the REPAIR Act obligates manufacturers to make repair information and tools available to vehicle owners, repair facilities, and makers of aftermarket parts without restrictions or limitations ... at a fair, reasonable, and non-discriminatory cost.”⁹⁸ In addition, manufacturers are required, after the issuance of appropriate regulations discussed in more detail below, to make vehicle-generated data available to vehicles owners and their designees “directly and wirelessly ... through a standardized access platform” for vehicles that include wireless or telematics systems.⁹⁹

Beyond their obligations to make data, information, and tools available, the Act would preclude manufacturers from mandating or implying a mandate to use specific brands or parts, tools, or equipment. Nor could they recommend particular brands without including a prominent notice informing consumers of their right to choose other makers of parts tools and equipment.¹⁰⁰

Importantly, the REPAIR Act takes into account the complexity of evolving automotive technology by incorporating agency and industry expertise. The act requires the FTC, with input from the National Highway Traffic Safety Administration (NHTSA), to designate an independent entity —not controlled by vehicle manufacturers—tasked with administering secure access to the required standardized access platforms created by manufacturers. This independent body would “consist of a cross-section of industry stakeholders, including aftermarket part manufacturers, telematics service providers, and motor vehicle manufacturers.” Relatedly, the NHTSA would be tasked with issuing regulations and standards to ensure the security of vehicle-generated data” accessed through the standardized access platform.¹⁰¹

⁹⁷ Id. § 3(a)(2). However, the Act would permit manufacturers to “employ[] cryptographic or technological protections necessary to secure vehicle-generated data safety critical vehicle systems, and vehicles.” Id. § 3(a)(4).

⁹⁸ Id. § 3(a)(2)

⁹⁹ Id. Under the Act, a “standardized access platform” is defined as a cybersecure authentication and authorization system developed by a motor vehicle manufacturer, for the motor vehicles it manufactures, that has the ability to securely access and communicate vehicle-generated data emanating directly from a motor vehicle via direct local and remote wireless data connections bidirectionally and in real-time.” Id. § 7(a)(17).

¹⁰⁰ These prohibitions no not apply to recall and warranty repairs. Id. § 3(a)(3).

¹⁰¹ Id. § 5(a).

In addition, the Act calls for the creation of the Fair Competition After Vehicles are Sold Advisory Committee.”¹⁰² The Advisory Committee would develop recommendations to the FTC, focusing on the implementation of the act, emerging barriers to repair, and aftermarket competition issues.¹⁰³ It would comprise the Director of the FTC’s Bureau of Competition, the Administrator of the NHTSA, and eleven industry participants representing vehicle manufacturers and dealers, independent repair, part and tool manufacturing, insurance providers, and consumer rights organizations, among others.¹⁰⁴

The provisions of the REPAIR Act and any regulations arising from them are to be enforced by the FTC, with violations treated as unfair or deceptive acts and practices.¹⁰⁵ Although it does not establish a civil cause of action, the REPAIR Act outlines a process that allows vehicle owners and others to file complaints with the FTC.¹⁰⁶

The REPAIR Act represents a significant step forward for restoring a vibrant competitive market for auto repair throughout the United States and recognizing consumers’ rights to control the devices they purchase. It ensures that vehicle owners can access and direct the valuable flows of data their cars generate and transmit. That control unlocks market competition by allowing repair providers designated by consumers to access vehicle data and repair information free of any restrictions or limitations imposed by vehicle manufacturers. The creation of an independently administered standard for accessing vehicle data across makes and models would roll back the privatization of diagnostic and repair information, restoring the competitive balance in the auto repair industry that Congress first endorsed in 1990. At the same time, the REPAIR Act is designed to protect the security and privacy of consumers’ vehicle data by enlisting agency and industry expertise. As vehicles grow more dependent on software and networked features, the REPAIR Act provides safeguards necessary to ensure competition and consumer rights in the auto repair market in the coming decades.

The REPAIR Act is Consistent with Broader Legislative & Administrative Action

Restrictions on repair are a growing concern throughout the economy. As a result, legislators and regulators at both the state and federal levels have taken steps to reinforce

¹⁰² Id. § 4(a).

¹⁰³ Id. § 4(c).

¹⁰⁴ Id. § 4(b).

¹⁰⁵ Id. § 6(a) (citing 15 U.S.C. 57a(a)(1)(B)).

¹⁰⁶ Id. § 6(c).

consumers' right to repair and facilitate competition in repair markets. A growing number of legislative proposals, administrative priorities, and enforcement actions addressing the right to repair have been proposed or undertaken in recent months. The REPAIR Act, while consistent with the underlying policy concerns that motivate these efforts, provides a distinct set of benefits that other proposals cannot promise.

On the legislative front, a number of bills that address repair restrictions have been introduced in the 117th Congress. The Save Money on Auto Repair Transportation (SMART) Act was introduced by Representative Issa.¹⁰⁷ It would limit liability for infringement of design patents directed to the vehicle exterior components, like hoods or fenders, when those components are used in the repair or restoration of a vehicle. This limitation would permit the manufacture, sale, and use of third-party components and significantly reduce repair costs. Senator Tester's Agriculture Right to Repair Act would require manufacturers of agricultural equipment to make documentation, parts, software, and tools available for the repair of such equipment by owners or independent repair providers on fair and reasonable terms.¹⁰⁸ Representative Morelle's Fair Repair Act would impose similar obligations on manufacturers of a range of consumer electronics equipment.¹⁰⁹ And the Freedom to Repair Act, introduced by Representative Jones, would amend § 1201 of the Digital Millennium Copyright Act to permit circumvention of technological protection measures for the purposes of diagnosis, maintenance, and repair.¹¹⁰ In addition, it would permit the creation and distribution of tools for those purposes.¹¹¹

At the state level, dozens of legislatures have considered broad right to repair legislation. In 2022, the New York Assembly and Senate passed a bill that would require manufacturers of consumer electronics and other devices to supply diagnostic and repair information, tools, and parts to owners and independent repair shops.¹¹² Repair advocates expect additional states to adopt similar legislation in the coming years.

In addition, the executive branch has expressed a commitment to consumers' right to repair. In the wake of the FTC's *Nixing the Fix* report, which highlighted the scope of existing repair restrictions, President Biden issued an executive order designed to

¹⁰⁷ H.R.3664, 117th Congress.

¹⁰⁸ S.3549, 117th Congress.

¹⁰⁹ H.R.4006, 117th Congress.

¹¹⁰ H.R.6566, 117th Congress.

¹¹¹ *Id.*

¹¹² S4104A; A7006B. These bills do not cover all equipment, specifically exempting automobiles, home appliances, and medical equipment, among other categories.

promote competition across the U.S. economy in July of 2021.¹¹³ The order encouraged the FTC to use its power to address “unfair anticompetitive restrictions on third-party repair or self-repair.”¹¹⁴

Less than two weeks later, the FTC issued a unanimous policy statement outlining its plans to address repair restrictions.¹¹⁵ In that statement, the FTC committed to “prioritize investigations into unlawful repair restrictions” as potential violations of the Magnuson-Moss Warranty Act, antitrust law, and the prohibitions against unfair and deceptive practices. In the months since, the Commission has announced three right to repair cases, alleging unlawful conduct by Harley-Davidson, Weber, and Westinghouse.¹¹⁶ And FTC Chair Lina Khan has noted that repair restrictions remain a top priority for the commission “given that the growing digitization just gives additional tools and levers for ... auto manufacturers to be manipulating what types of repairs can and cannot occur.”¹¹⁷

Recent months have also seen more than a dozen class action complaints, as well as an FTC complaint, alleging that John Deere’s restrictions on the repair of agricultural equipment violate U.S. antitrust law.¹¹⁸

Each of these developments would offer important, incremental improvements in repair markets for a variety of goods in the United States. But none are designed to specifically target the unique threats to a competitive auto repair market that the REPAIR Act addresses. By mandating the availability of vehicle data and repair information and tools

¹¹³ Exec. Order 14,036, 86 Fed. Reg. 36987 (July 9, 2021).

¹¹⁴ Id. It also instructed the Secretary of Defense to submit a report to the White House outlining a plan to avoid procurement contracts that stand in the way of military personnel repairing equipment in the field. Id.

¹¹⁵ *Policy Statement of the Federal Trade Commission on Repair Restrictions Imposed by Manufacturers and Sellers*, July 21, 2021, www.ftc.gov/system/files/documents/public_statements/1592330/p194400repairrestrictionspolicystatement.pdf.

¹¹⁶ Lesley Fair, *FTC Announces Three Right-to-Repair Cases: Do Your Warranties Comply with the Law?*, FTC, July 7, 2022, <https://www.ftc.gov/business-guidance/blog/2022/07/ftc-announces-three-right-repair-cases-do-your-warranties-comply-law>

¹¹⁷ Christian Hinton, *FTC Chair Says Right To Repair Is A Top Priority*, Tire Review, June 8, 2022, <https://www.tirereview.com/ftc-chair-right-to-repair>.

¹¹⁸ Paul Roberts, *Baker s Dozen: 13 Lawsuits Allege Anticompetitive Practices by Deere, Fight to Repair*, June 16, 2022, <https://fighttorepair.substack.com/p/bakers-dozen-13-lawsuits-allege-anticompetitive>.

while also ensuring secure access to telematics data, the REPAIR Act balances the need for access to vehicle data with consumers' safety and security interests.

Conclusion

The widespread integration of software and telematics systems have given vehicle manufacturers and their dealers an opportunity to reshape the thriving market for auto repair in the United States in a way that reduces competition, raises prices, and undermines consumer autonomy and choice. The Right to Equitable and Professional Auto Industry Repair (REPAIR) Act, H.R. 6570, offers a set of robust protections that would return control over vehicles to the consumers who own and operate them. In doing so, it would eliminate artificial barriers to competition that hinder the efforts of independent repair providers, but it would do so in a manner that ensures consumer safety and securing by incorporating technical expertise from both industry and relevant federal agencies.