

Congress of the United States
U.S. House of Representatives
Committee on Small Business
2361 Rayburn House Office Building
Washington, DC 20515-6315

MEMORANDUM

TO: Members, Subcommittee on Underserved, Agricultural, and Rural Business Development
FROM: Jared Golden, Chairman
DATE: September 14, 2022
RE: Subcommittee Hybrid Hearing: “Right to Repair and What it Means for Entrepreneurs”

The Committee on Small Business Subcommittee on Underserved, Agricultural, and Rural Business Development will meet for a hybrid hearing titled “Right to Repair and What it Means for Entrepreneurs.” The hearing is scheduled to begin at **10:00 A.M. on Wednesday, September 14, 2022, in person in 2360 Rayburn House Office Building and via the Zoom platform.**

Many of today’s consumer electronics and automobiles have become increasingly more difficult to fix or maintain. Oftentimes, the diagnostic software and component parts necessary for repairs are not easily accessible. This may be a result of repair restrictions created by the manufacturers of these items. Not only does this result in massive amounts of electronic waste, but it inhibits opportunities for independent businesses to repair items, increases costs on consumers and small firms, and is inconvenient for individuals in rural areas. This hearing will examine the impacts of these types of restrictions on small businesses. Members will hear from experts and small businesses about practices that restrict repair, how those practices harm independent businesses, and what policy proposals exist to address them.

Panel

- Ms. Gay Gordon-Byrne, Executive Director, Digital Right to Repair Coalition, North River, NY.
- Mr. Brian Clark, Co-owner and Chief Technology Officer, iGuys Tech Shop, North Conway, NH.
- Mr. Jim Gerritsen, Marketing Manager, Wood Prairie Family Farm, Bridgewater, ME.
- Mr. Ken Taylor, President, Ohio Machinery Co., Broadview Heights, OH.

Background

In a 2021 report to Congress, the Federal Trade Commission (FTC) identified ways manufacturers can limit the ability to make repairs on certain products – particularly mobile phones, automobiles,

agricultural machinery, and medical equipment.¹ They can do this by making products physically harder to open or requiring specialized tools, difficult to obtain parts, and access to proprietary diagnostic software for any repairs.² This practice can increase costs for consumers and businesses, requiring them to go to manufacturers for repair or replace their product entirely. Not only does this incentivize more waste by consumers, but it also harms competition by limiting choices for consumers and creating barriers to doing business for independent repair shops.

This issue first gained national attention when the 1990 Clean Air Act required automobile manufacturers to install On-Board Diagnostic systems that would identify issues with engines that increase emissions.³ While this had a positive effect on emissions, it also kicked off an increasingly computerized automotive industry, where modern cars are controlled more by code than mechanics, and software controls everything from the radio to navigation systems.⁴ As a result, some manufacturers refused to continually update independent repair shops with the same tools and official service information like repair manuals, putting them at a competitive disadvantage to dealerships.⁵ In 2012, however, Massachusetts passed the first automotive right to repair bill with 86 percent of the vote, leveling the playing field between dealers and independent auto shops.⁶

In recent years, these issues have resulted in a number of bipartisan legislative proposals across the country. Since 2018, 40 states have introduced right to repair bills, including 27 states with active bills in 2021. In May 2021, the Federal Trade Commission issued a report to Congress on repair restrictions,⁷ and indicated that it will devote greater resources to investigating and bringing cases against manufacturers who engage in this conduct.⁸ Currently, there are several federal legislative proposals to establish a “right to repair,” across different industries throughout the country.

Repair Restrictions and the Impact on Small Businesses

Repair restrictions can harm small businesses in a variety of ways. They have the dual impact of increasing costs on small businesses that depend on machinery and acting as a barrier to doing business for independent service organizations (ISOs). Additionally, repair restrictions can provide an example of how unfair franchise agreements can hurt entrepreneurs.

¹ FEDERAL TRADE COMMISSION, *Nixing the Fix: An FTC Report to Congress on Repair Restrictions*, May 2021. https://www.ftc.gov/system/files/documents/reports/nixing-fix-ftc-report-congress-repair-restrictions/nixing_the_fix_report_final_5521_630pm-508_002.pdf

² *Id.*

³ Kevin O'Reilly, *Deere in the Headlights*, U.S. PIRG EDUCATION FUND, February 2021. <https://uspirg.org/feature/usp/deere-headlights>

⁴ Kyle Wiens, *You Gotta Fight for Your Right to Repair Your Car*, THE ATLANTIC, February 13, 2014. <https://www.theatlantic.com/technology/archive/2014/02/you-gotta-fight-for-your-right-to-repair-your-car/283791/>

⁵ *Id.*

⁶ *Id.*

⁷ *Supra* note 1.

⁸FEDERAL TRADE COMMISSION, *Policy Statement of the Federal Trade Commission on Repair Restrictions Imposed by Manufacturers and Sellers*, 2021. https://www.ftc.gov/system/files/documents/public_statements/1592330/p194400repairrestrictionspolicystatement.pdf

Independent Service Organizations

Independent service organizations (ISOs) are third party repair organizations that operate independently of manufacturers. These organizations are important to consumers because they can be more cost-effective to consumers or businesses that are hiring them and can be more readily available when these repairs are time sensitive. For instance, in the medical equipment industry, manufacturers of ventilators, dialysis machines, and other devices routinely restrict access to essential repair materials, leaving technicians without the tools they need to repair equipment as soon as it breaks.⁹ As a result, manufacturer branded technicians have to travel onsite to make the repairs, oftentimes delaying care for hospital patients. Moreover, repairs by manufacturers often cost much more than through independent repair shops. In the medical equipment world, some servicers can maintain diagnostic imaging equipment for \$150-\$250 an hour.¹⁰ For the same services, manufacturers can charge \$500-\$600 per hour with a four-hour minimum.¹¹

ISOs are also important repair providers to rural areas, which often do not have local, brand-affiliated repairmen and contractors readily available. They can be essential in making repairs for local consumers or business-owners. Without access to ISOs, consumers may have to mail their devices away to brand-affiliated repair shops, which can range from costly and inconvenient to untenable if the individual manages their business from that damaged device. If mailing device or machine is untenable, driving to the nearest dealership or brand-affiliated shop may be even more out of reach – possibly being hundreds of miles and hours away.

Farmers

Some of the more popular instances of repair restrictions are those used by the manufacturers of modern agriculture equipment. For many generations, farmers have had equipment break down at crucial junctures in the season and have been forced to repair them to continue their harvest. However, modern combine harvesters, tractors, and other farm equipment generally rely on software guided by sensors and control systems to function properly. In fact, U.S. PIRG found that a John Deere S760 has as many as 125 sensors, and each sensor is connected to a controller network.¹² When a single component or controller network in these machines breaks down, it can cause the entire machine to cease functioning, or put it into “limp mode.”¹³ Unfortunately, manufacturers restrict software tools needed to diagnose problems and install replacement parts.¹⁴ As a result, farmers are forced to either haul their machine to the nearest dealership for repairs or wait for a field technician to arrive to complete the repair.¹⁵

This can take time away from harvesting crops during crucial moments in the season – potentially causing farmers financial distress on top of inconvenience. For instance, a Kansas-based farmer was forced to wait 32 days for repairs on a fertilizer spreader.¹⁶ As a result, he lost two-three days of planting and an estimated \$30,000-\$60,000 in revenue.¹⁷

⁹ *Supra* note 1.

¹⁰ *Id.*

¹¹ *Id.*

¹² *Supra* note 2.

¹³ *Id.*

¹⁴ *Id.*

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

Franchisees

While franchising can create opportunities for entrepreneurship, it is well documented that unfair franchising agreements can be used to take advantage of franchisees.¹⁸ Repair restrictions can provide an additional example of how these agreements can be used to take more fees from these entrepreneurs. One of the most notorious examples is the McDonald's ice cream machine, which has become popular in recent years for always being broken.¹⁹ In fact, a website called "mcbroken.com" was created to track all the broken McDonald's ice cream machines in the U.S. As of August 24, 2022, 13 percent of all machines are not working in the U.S., including 32.7 percent of the machines in New York City.²⁰

McDonald's ice cream machines are manufactured by a company called Taylor Commercial Foodservice LLC, which has been supplying the company with these machines for decades. Franchisees have long been required by contract to use these machines in their restaurants. During the nightly cleaning cycle, they often breakdown and display a complicated error messages that can be vague and difficult to fix without certification.²¹ Moreover, franchise owners have reported that the machines are over-engineered in order to make them more difficult for employees to fix.²² As a result, franchisees are required to hire technicians certified with Taylor to diagnose the problem and fix the machine.²³ This can be harmful to the franchisee because it can create long waiting periods and costly repair services, it can also cause them to lose out on potential business that the ice cream machine can create.

Antitrust and Anti-competitive Practices

Repair restrictions can come in several forms that limit the ability of consumers to repair a product themselves or hire an independent repairman to do it for them. These restrictions can be outright illegal and subject to antitrust law if the effect is to harm competition.²⁴ For instance, tying is an illegal anti-competitive practice, and is done when the sale of one product is conditioned on the purchase of a second product from the same firm.²⁵ In this case, a tying claim might allege that a manufacturer unlawfully tied the availability of parts to the purchase of its repair service.²⁶ The following practices have been used by manufacturers to limit the ability of consumers or third parties to repair certain products.

Physical Restrictions

Physical restrictions are restrictions built into products that limit the ability to open a certain device or physically move and replace certain parts.²⁷ This can include highly specialized nuts and bolts

¹⁸ Strategies to Improve the Franchise Model: Preventing Unfair and Deceptive Franchise Practices, April 2021.

¹⁹ Heather Haddon, *McDonald's McFlurry Machine is Broken (Again). Now the FTC is on it*, WSJ, Sept. 1, 2021. <https://www.wsj.com/articles/mcdonalds-mcflurry-machine-is-broken-again-now-the-ftc-is-on-it-11630522266>

²⁰ McBroken.com

²¹ *Supra* note 20.

²² *Id.*

²³ *Id.*

²⁴ *Supra* note 1.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

that require unique screw heads.²⁸ It can also include the overuse of glue or even welding a product shut.²⁹

Unavailability of Parts, Manuals, and Diagnostic Software and Tools

An important part of being able to fix a product as a consumer is knowing how and having the right parts. Some manufacturers work to control spare parts to make it a challenge for individuals and independent repair shops to replace consumable parts that will likely need replacement over a product's life cycle.³⁰ One example of this is mobile phone batteries. It may also lead consumers to simply replace a product, rather than repair it.

Service manuals are also an important aspect of repairing a product by providing instructions and guidance on how to fix components that may be broken or not operating properly. Without manuals, independent repair providers and consumers claim repairs are very difficult or impossible.³¹

Diagnostic software is also important for ISOs and consumers. Without this software, error codes can be impossible to read, and it can be impossible to discover what issue is impairing the function of a product.³²

Designs that Make Independent Repairs Unsafe

Designs that make independent repairs unsafe pertain specifically to the use of lithium-ion batteries in products that range from consumer electronics to automobiles.³³ The FTC discovered that the use of glue to fasten polymer cells into mobile phones and other devices also increases the risk that cells will be punctured when they are removed by individuals and independent repair shops that don't have access to specialized solvents or tools.³⁴ This can increase the risk of chemical fires.

Telematics

Cars are often equipped with telematics that monitor their status and relay that information back to manufacturers.³⁵ These manufacturers have exclusive insight into the vehicle's operations and diagnostics systems.³⁶ They can use them to send advertisements to the vehicle's display following an accident and steer the customer to a dealership or affiliated repair facility.³⁷

Application of Patent Rights and Enforcement of Trademarks

The use of intellectual property laws can create barriers to conducting repairs not authorized by the manufacturer of a product or result in rising costs for repairs and repair parts.³⁸ Manufacturers

²⁸ *Id.*

²⁹ *Id.*

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

³⁵ *Id.*

³⁶ *Id.*

³⁷ *Id.*

³⁸ *Id.*

can use intellectual property to restrict access to aftermarket parts, reducing competition for original parts, particularly for automobiles.³⁹

Disparagement of Non-Manufacturer Parts and Independent Repair

Manufacturers also are able to promote their own parts and affiliate repair networks, including by disparaging the quality of aftermarket parts and independent repair shops. This is also prevalent in the automobile industry. The FTC found that Kia and Honda both posted bulletins that disparaged the use of non-original equipment and the use of aftermarket products.⁴⁰ Safelite AutoGlass reported that vehicle manufacturers have cast their products as dangerous for drivers.⁴¹

Software locks, Digital Rights Management, and Technical Protection Measures

Software locks, digital rights management (DRM) tools or technological protection measures (TPMs) are access control technologies implemented by manufacturers. Manufacturers argue that these measures are necessary to protect proprietary hardware, but they can often lock basic repairs.⁴² Embedded software can force consumers to have their maintenance and repair done by manufacturers and their service networks.⁴³ For instance, replacing an iPhone's screen with a brand new one will disable certain features, like TrueTone.⁴⁴ In the automotive industry, manufacturers can limit a control module to function with a single vehicle identification number, constraining a single part to a single car.⁴⁵

End User License Agreements

According to the FTC, many products are now physical goods and embedded software that the manufacturer licenses to consumers under the terms of an End User License Agreement.⁴⁶ This has complicated the concept of ownership in many products. Nearly all End User License Agreements restrict repairs by prohibiting modifications of software for any purpose.⁴⁷ This can restrict basic repairs on products.

Policy Landscape

On July 9, 2021, President Biden issued an executive order aimed at promoting competition in the U.S. economy. This executive order aims to promote competition, and thus limit anti-competitive practices in a number of ways, including limiting restrictions on repair. Section five of the executive order gives the Chair of the FTC the authority to exercise statutory rulemaking authority to combat “unfair competitive restrictions on third-party repair or self-repair of items such as the restrictions imposed by powerful manufacturers that prevent farmers from repairing their own equipment.”⁴⁸ As a result, the FTC has taken several actions on the issues detailed above,

³⁹ *Id.*

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² *Id.*

⁴³ *Id.*

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ THE WHITE HOUSE, *Executive Order on Promoting Competition in the American Economy*, July 9, 2021. <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/07/09/executive-order-on-promoting-competition-in-the-american-economy/>

including opening an investigation into John Deere’s practices after a complaint by groups like Farm Action.⁴⁹ They’ve also opened an investigation into the McDonald’s ice cream machines, asking franchisees for information.⁵⁰

There are several pieces of federal legislation that aim to combat this issue. The REPAIR Act (H.R. 6570), The Freedom to Repair Act (H.R. 6566), and the Fair Repair Act (H.R. 4006) are all bills currently introduced that tackle separate issues within the “Right to Repair” policy area.

H.R. 6570⁵¹

On February 2, 2022, Rep. Rush (D-IL) introduced the Right to Equitable and Professional Auto Industry Repair Act, or REPAIR Act of 2022. This legislation is directly aimed at the auto industry, requiring motor vehicle manufacturers to share telematics information with vehicle’s owners. Specifically, the manufacturers may not impair the owners’ access to diagnostic information or impair aftermarket parts manufacturers from producing or offering compatible aftermarket parts. It also gives the FTC the authority to create a committee to assess and report on existing and emerging barriers to vehicle repairs.

H.R. 6566⁵²

On February 2, 2022, Rep. Jones (D-NY) and Rep. Spartz (R-IN) introduced the Freedom to Repair Act, which would reform outdated copyright laws that outlaw certain types of repair and repair tools, like bypassing digital security locks.

H.R. 4006⁵³

On June 17, 2021, Rep. Morelle (D-NY) introduced the Fair Repair Act, which would require manufacturers to make diagnostic, maintenance, and repair equipment available to independent repair providers on fair and reasonable terms.

Conclusion

Repair restrictions are found across industries in a variety of consumer products from cars to phones to medical devices to agriculture machinery. They act to bring more business back to the manufacturer of a product, either for repair or replacement, and restrict the ability of consumers or independent repair shops to fix their own products. This can lead to costly or time-consuming hoops for consumers or small businesses to jump through just to make basic repairs. Enacting common-sense and bipartisan right to repair laws can give more freedom and ownership back to consumers, help small businesses and independent repair shops, and restrict the ability of large companies to monopolize repair and aftermarket products.

⁴⁹ FARM ACTION, *FTC Complaint Sparks Investigation into Deere’s Repair Restrictions*, April 4, 2022. <https://farmaction.us/2022/04/04/ftc-complaint-sparks-investigation-into-deeres-repair-restrictions/>

⁵⁰ *Supra* note 16.

⁵¹ REPAIR Act, H.R. 6570, 117th Cong (2nd Sess. 2022).

⁵² Freedom to Repair Act, H.R. 6566, 117th Cong. (2nd Sess. 2022).

⁵³ Fair Repair Act, H.R. 4006, 117th Cong. (1st Sess. 2021)