

# The Right to Repair in Agriculture



## Executive Summary

Although modern agricultural equipment, such as combines, often includes computer technology, End User License Agreements do not allow repairs when the equipment breaks down unless they are performed by the manufacturer. The “right to repair” in agriculture allows farmers, farm operators and other independent repair providers to fix farm equipment without facing legal repercussions from manufacturers. House Bill [2402](#) and Senate Bill [1086](#) would allow owners of products purchased or used in Missouri and independent repair providers to have the right to access the same diagnostic and repair information that manufacturers supply to authorized repair providers. The bills also introduce provisions for non-compliance or violation of the rules by the manufacturers or retailers.

## Highlights

- Authorization requirements and repair restrictions may limit farmers’ access to repair options, increase costs for consumers, increase wait times, and decrease opportunities for repair shops and servicing in rural communities.
- For farm equipment, software technological protection measures (TPMs) that prevent access to the code or modification of software prohibit farmers from being able to find third-party repair markets.
  - Software restrictions created by TPMs and network connectivity can prevent repair or modification to equipment by rendering machinery inoperable unless “activated” by approved technicians with specialized tools or software.
- Under the Magnuson-Moss Warranty Act, manufacturers cannot forcefully tie their services to the purchased product, unless it is free to the customer.
- Since 2021, 27 states have introduced repair-friendly legislation that would allow repairability and reopening of repair markets, regarding farm equipment, consumer electronic devices and medical devices.

## Limitations

- Even if legal reforms in repair and servicing at the state level were made, federal intellectual property laws may dictate consumer rights to repair.
- Some existing federal copyright laws, such as the Digital Millennium Copyright Act (DMCA), can come in conflict with other existing federal antitrust laws, such as the Magnuson-Moss Warranty Act or the Sherman Antitrust Act or Federal Trade Commission Act.

## Research Background

### Effects of Restrictions on Repairs

Over the last century, manufacturers have increasingly restricted the ability of equipment owners to repair their products. Some restrictions include introducing specialized software into their products, requiring specialized and custom tools, and restricting access to product manuals and repairing instructions.<sup>1</sup> The growing number of products that include computerization and technological protection measure (TPM)-protected software into their design and function has allowed many manufacturers to retain control over the manner of repair and choice of technician.

As a response, the right to repair (R2R) movement, which started in the late 1980s,<sup>1</sup> advocates for manufacturers to assist consumers in repairing and maintaining products they have purchased by offering consumers repair documentation, spare parts protected by industrial design, and patented special tools needed to perform repairs. The R2R in agriculture is inspired by a similar movement in the automotive industry; in 2012, Massachusetts passed the United States' first [Motor Vehicle Owners' Right to Repair Act](#), which required automobile manufacturers to provide the necessary documents and information to allow anyone to repair their vehicles. Since then, car manufacturers voluntarily have agreed to make the same information and tools they provide to franchised dealers available to independent repair shops.

By restricting access to independent parts, manufacturers, and technicians, manufacturers may limit some types of business opportunities, reduce product choice, and raise prices for consumers. This is specifically true for repair in **farm equipment, where profit margins on repairs can be five times higher than the margins for the sale of equipment**,<sup>1</sup> and some corporations may bring in more revenues from repairs than they do from the sale of goods. According to the National Automobile Dealers Association, a typical car dealer derives 48% of its profits from repairs, compared to just 26% from car sales.<sup>2</sup> The rise in cost may be related to both the rising cost of the standard parts of the cars and the growth of electronics increasingly embedded in cars and farm equipment.

### Effects on Rural Communities

Out of its 114 counties, 101 counties in Missouri are rural, and more than one in three Missourians lived in rural communities as of 2000 (the year when the most recent data were available).<sup>3</sup> However, rural communities are often located far from manufacturer-authorized repair shops or technicians; for instance, there are only 14 John Deere repair shops in Missouri.<sup>4</sup> Additionally, **by restricting access to parts, tools, or repair shops, manufacturers may reduce market opportunities for independent shops. Centralized repair markets may limit farmers' access to repair options, increase wait times for repair, increase costs, and prevent farm operators from doing their work**, often during the busiest times of the year (e.g., during harvest season).<sup>1</sup>

Decentralized repair markets may distribute economic growth and employment, since independent repair technicians and part suppliers are often local.<sup>5</sup>

### **Effects on Innovation & Economic Growth**

In addition to posing challenges for farmers and independent technicians, restrictions on repair can also curtail innovation and economic growth in the technology sector. Profitable industries with strong export activity and employment creation based in the U.S. create and distribute add-on equipment for the Original Equipment Manufacturer or OEM-agricultural machinery.<sup>5</sup> Known as the “short line”, these businesses rely on OEM equipment as their host platform to develop innovative products that serve niche and crop-specific needs of farmers. As independent part suppliers, restrictions on repair may also restrict the viability of short line products.<sup>5</sup>

### **Challenges to Restrictions**

On a federal and state level, manufacturers’ aftermarket restrictions have been challenged under antitrust laws that prohibit tying, exclusive dealing, refusals to deal, and violating consumer protection statutes by improperly violating warranties and repair terms. For example, under the [Magnuson-Moss Warranty Act](#) (Warranty Act), “manufacturers cannot forcefully tie their services to the purchased product, unless it is free to the customer.” Also, “The Warranty Act and FTC regulations prevent manufacturers from voiding the consumer’s warranty if repair services are performed by a third party or if non genuine, recycled, or aftermarket parts are used.”

### **Copyright Law vs. Monopolies**

By not allowing software and diagnostic equipment to be available to farmers or third-party repairs, major manufacturers may effectively reserve the entire secondary market for themselves and create a de facto monopoly.<sup>6</sup> Courts around the U.S. have held that corporations cannot exploit their acquired copyright and intellectual property rights to dominate markets in a way that violates antitrust law. On copyright law specifically, the Library of Congress under Section 1201 of the DMCA has broad authority to create exceptions to copyrightable material.<sup>3</sup> Similar to its ruling in 2015, the Library of Congress has the authority to create additional exceptions for copyrighted works when used in the context of repair.<sup>6</sup> An example of antitrust/competition law and the use of TPMs under the DMCA to preclude downstream market competition, is the [Lexmark International Inc vs. Static Control Components](#) (2014) case.<sup>7</sup>

### **Similar Legislation**

Repair-friendly legislation can be found both at the state and federal level. State laws may require manufacturers to share the information necessary for repair. Digital rights management (DRM) tools or technological protection measures are control technologies for restricting the use of proprietary hardware and copyrighted works. Copyright reform could limit or remove DRM, which states cannot do.

Since 2021, 27 states (AR, CA, CT, CO, DE, FL, HI, IL, KS, MD, MA, MT, NE, NV, NJ, NH, NY, OK, OR, SC, PA, RI, TX, VT, WA) have carried legislation on the right to repair (also called fair repair), including consumer products (such as electronic devices and medical devices); none of these have yet become a state law.

## References

1. Lumbard, K., Ahuja, V., & Snell, M. (2020) Open Agriculture and the Right-to-Repair Community Movement. MWAIS 2020 Proceedings.
2. NADA Data 2017, Annual Financial Profile of America's Franchised New-Car Dealerships, <https://www.nada.org/2017NADAdata/>
3. US Department of Agriculture Economic Research Service. Missouri - Three rural definitions based on Census Places. [https://www.ers.usda.gov/webdocs/DataFiles/53180/25580\\_MO.pdf?v=0](https://www.ers.usda.gov/webdocs/DataFiles/53180/25580_MO.pdf?v=0)
4. John Deere Dealer Locator. [https://dealerlocator.deere.com/servlet/country=US?locale=en\\_US](https://dealerlocator.deere.com/servlet/country=US?locale=en_US)
5. Rosborough, A. D. (personal communication, March 2021).
6. Rosborough, A. D. (2020). Unscrewing the future: the right to repair and the circumvention of software TPMs in the EU. *J. Intell. Prop. Info. Tech. & Elec. Com. L.*, 11, 26.
7. Daniel Cadia, Fix Me: Copyright, Antitrust, and the Restriction on Independent Repairs, 52 U.C. Davis L. Rev. 1701, 1710 (2019).