



April 22, 2019

TO: House Committee on Business & Labor
FR: Charlie Fisher, State Director, Oregon State Public Interest Research Group (OSPIRG)
RE: HB 2688

OSPIRG is a statewide, citizen-based organization representing thousands of Oregonians.

OSPIRG supports HB 2688 as an important consumer protection and waste-reduction policy.

Companies use their power in the marketplace to make things harder to repair. Some companies design products to be impossible to repair -- such as gluing the battery in a smartphone so it cannot be replaced -- or making repair proprietary so that only the manufacturing company can do the repairs. Most companies won't make the tools, schematics or replacement parts available for sale, so even if repairs can be done by the user or an independent repair business, it's more challenging and done with suboptimal products.

Right to Repair requires manufacturing companies of digital equipment to make the diagnostic equipment, schematics, replacement parts, and tools to the user or a third party at a fair and reasonable price. In this case, the legislation defines "fair & reasonable" as the same price they already offer those tools, schematics, and parts to an authorized repair provider.

Why We Need Right to Repair

Companies have grown more aggressive in their tactics to control repair. A couple examples highlight the need for reforms:

- About a year and a half ago in an attempt to prolong battery life, Apple used a software update to slow down processors in their older phones which caused noticeable slow-downs for the users.¹ In response to public blowback, they offered a discounted \$29 battery replacement, but these replacements came with large waitlists, and most people don't live close to an Apple store to have their phone repaired.² Right to Repair would increase options for repair by letting people replace their own batteries or let independent repair providers replace batteries with the higher-quality original parts.
- John Deere installs digital locks on some of their tractors and other farm equipment, which shut down the equipment until it can be serviced by a John Deere technician.³ They do not allow anyone to diagnose or reset the device without proprietary tools made available at steep fees. Farmers may have to forgo critical days of planting or harvest because their equipment is waiting to be unlocked by the manufacturer. Right to Repair reforms would remove these digital barriers for repair.

¹ [Apple iPhone Throttling Debacle Underscores Critical Right To Repair Legislation Issue](#), Forbes, December 2017

² [Run, don't walk, to replace your iPhone battery for \\$29](#), Washington Post, January 2018

³ [DIY Tractor Repair Runs Afoul Of Copyright Law](#), NPR, August 2015

Right to Repair Reduces E-Waste & Energy Use

- According to a study on e-waste by the Illinois Department of Commerce and Economy Opportunity, 80% of the life cycle energy use of consumer electronics is from manufacturing, and only 20% is from use after that in terms of powering and recharging. By extending the life of devices, we could substantially reduce the negative environmental impacts of consumer electronics.
- The U.S. Environmental Protection Agency estimated that 141 million cell phones were thrown out in 2009. Making it easier to extend the life of devices would allow for people to continue using their current device and strengthen the secondary market for used devices.⁴

Right to Repair Increases Safety and Reliability

- As it currently stands, many individuals and independent repair shops have figure out for themselves how to do repairs and often have to use third-party parts. Giving them access to the schematics and first-party parts would increase the quality and reliability of repairs.

Right to Repair Improves Cyber-Security

- There is more lengthy testimony of the record from Joe Grand, a Portland-area cyber security researcher, but to briefly quote his testimony:

“In the past decade, the acceptance and acknowledgement of security vulnerabilities in software has ... led to more secure software. The hardware world lags far behind, with many vendors claiming that closing products and preventing physical access for end-user repair will solve security problems. This is simply not true. The majority of hardware-based security vulnerabilities have been due to poor overall product design, easy and unprotected access to critical test and debug interfaces, and the existence of default passwords, misconfigurations, or backdoors. **Right to Repair legislation will be extremely helpful to security researchers like me.**”

Right to Repair Has No Interest in Propriety Information

- Access to parts, tools, and repair manuals are about how to replace or fix parts, not how to manufacture them in the first place. Nor is there any need to give access to the software programming of a device.

We urge you to support Right to Repair.

⁴[Improved Information Could Better Enable EPA to Manage Electronic Waste and Enforce Regulations, Report No. 13-P-0298](#), U.S. Environmental Protection Agency, Office of Inspector General, 2013.