

Konner Koroski
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Senator Herbig, Representative Daughtry, and member of the Committee on Innovation, Development, Economic Advancement and Business;

My name is Konner Koroski and I am a resident of Sidney, ME. I've taught myself and is skilled at repairing electronic devices. I am here to testify and express my support to the legislative document 1977.

We currently have a major problem that threatens our ability to choose where we can get our electronic devices repaired. This legislation seeks to ensure our right to have access to repair information including replacement parts, diagnostic software, and other necessary repair tools. Manufacturers currently can and do withhold some or all these this from us which in turn creates a severe disadvantage to any competitor. Since they have essentially a monopoly over the repair of their devices, they can jack up prices and pick and choose what they want to repair which incentivizes the consumer to buy a new device over repairing their old one. They are also able to create software locks and withhold the proper part/software to bypass it. This forces consumers to only be able to go through authorized means to repair. Error 53 was a software lock which made any iPhone that had it's original screen replaced then updated to iOS 9 unfunctional. Apple was fined \$6.6 million in Australia and fixed the issue. We are still seeing these software locks now. If you currently replace your iPhone battery without Apple's software, you lose battery health information. If you currently replace an iPhone screen without Apple's software, you lose true tone along with the ambient light sensor. If you currently replace the home button without Apple's software, you lose touch id and on models 7, 7 Plus, 8, and 8 Plus, you lose your entire home button.

I speak mostly of Apple because that's what I'm familiar with. This, however, does apply to most other manufacturers. There is only 1 Apple store in the state of Maine. Best Buy is an Apple Authorized Service Provider (or AASP) and there are only 4 of those in the state of Maine. There is also only a few AASP in the state of Maine. Needless to say, if you're not lucky to live in or around Augusta, Portland, or Bangor, you don't have an authorized place to go and have to resort to mailing in your repair. This creates extra costs and takes more time. Apple controls what they want to be repaired and what they don't both in-store and at their actual repair centers. Any retail Apple store along with their AASP, with the exception of basic troubleshooting, is only allowed to do screen repairs and battery replacements on iPhones. Any other repair has to be shipped to Apple. Apple decides whether they want their repair centers to do certain repairs. For example Apple won't service any iPad for any reason. I am a student at Mid Maine Technical Center, a

school that is certified to teach Apple repair, and the class I'm in currently gives me access to most of Apple's service guides and support information. You have to follow a strict procedure involving unnecessary steps and often have to replace the entire device when it's unnecessary. If you choose to want to become Apple's authorized, you have to follow their requirements, which many are unnecessary, listed at https://support.apple.com/content/dam/edam/applecare/images/en_US/otherassets/programs/AA_SP_requirements_summary.pdf. Independent repair can offer repairs that the manufacturer won't at cheaper prices, quicker turnaround times, and overall a different experience than you would get from the manufacturer. CBC has done 2 news pieces that expose how Apple is anti repair.

The quality of repair is not guaranteed to be better at an authorized place and worse at an unauthorized place. It depends whether you get a technician that knows what they are doing as opposed to one that doesn't know what they are doing. A common error in repairing an iPhone would be to screw the wrong screw into the wrong hole. This is known as long screwing the short hole. When you long screw the short hole, it drills through a layer of the motherboard which in turn kills it. Both authorized and unauthorized stores make this error. Your experience depends on what store you go to, not whether it's authorized or not.

Safety is one of the biggest concerns you will hear. Everything in life can be dangerous. Some electronics are more dangerous than others. It is the consumer's responsibility to accept the potential danger when servicing a product. For most products, manufacturers drastically exaggerated the danger. Louis Rossmann uploaded a video to YouTube that showed him ripping out an iPhone lithium-ion battery with a hammer. While I do not recommend you do that, it shows that they are not as dangerous as people think. This is true for most other dangers. People are going to attempt to service these products anyway, it would be safer to make all this information available rather than withholding it.

Security is the other biggest concern you will hear about. Nowhere in this bill does it say we want the source code. All we want is access to repair tools, diagnostic software, and replacement parts that the manufacturer provides to their repair stores. This bill is similar to the Motor Vehicle Owners' Right to Repair Act. Talk to any cybersecurity expert and they will tell you that the reason for most attacks is poorly written source code. If repair diagnostics, replacement parts, and repair tools were the reason to hacks, then we would see way more attacks than there are. Security through obscurity is insecure. If you are refraining this information from the public for the reason of security, when it is inevitably leaked online, it would cause massive security threats that are unfixable with software.

This process of planned obsolescence and replacement instead of repair is very costly to our environment. While it's true that the main goal of this legislation is not to reduce e-waste, it's

still important to realize that it's an effective part of the solution. Repairing means less e-waste. When you recycle something, you can only recycle so much of it. Therefore you want to reuse as much as you can before you replace it. Reuse always comes before recycle. The benefits incentivize the consumer to want to repair. This method is proven effective with the bottle bill. No one I know recycles bottles because it's healthy for the environment. They recycle because they get money back for it. This incentivizes people to recycle, which in turn creates a healthier environment.

Thank you for taking time to read my testimony. If you have any further questions, feel free to contact me at konnerkoroski@gmail.com.