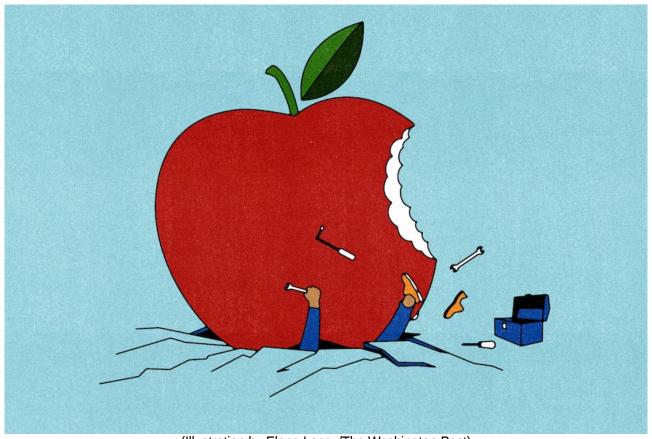
## Apple is pushing repair laws but still puts limits on iPhone fixes

Advocates think Apple's approach still needs work, even as it aligns itself with the White House's pro-repair push

By Chris Velazco October 25, 2023



(Illustration by Elena Lacey/The Washington Post)

Broken iPhone screens are pretty common. So are iPhone batteries that don't hold a charge as long as they used to. And if you live near an Apple Store or a Best Buy, getting those issues fixed shouldn't be a problem — as long as you're willing to pay.

Depending on the age of your iPhone, an official screen replacement can cost between \$129 and \$379, while an out-of-warranty battery swap will run you between \$69 and \$99. But what if you're on a tighter budget? Or if you can't easily get to an Apple-authorized repair provider?

Turning to a neighborhood repair shop may be your best bet — but that could come with a catch. If the fix is performed with third-party replacement parts — or even parts out of another, perfectly good iPhone — you may see warnings pop up saying your screen or battery may not be "genuine." Here's the thing, though: Those messages don't necessarily mean that the repair shop screwed up, or that it used shady parts to fix your phone.

What Apple really takes issue with in this situation is that the repair didn't use the official parts it sells. And that has some advocates and professionals worried about people's ability to access convenient, affordable repairs when they're needed the most.

"Companies use these warning messages to scare consumers away from independent repair," said Aaron Perzanowski, a repair researcher and law professor at the University of Michigan. "So even if the provider uses a high quality part or even an [original equipment manufacturer] part, consumers are left with this worry that somehow the repair was shoddy or the device's performance has been degraded, whether that's true or not."

Those on-screen warning messages only last for two weeks, but they're not the only symptom someone could face. In some cases, features like Face ID, automatic screen brightness, or True Tone — a feature that makes colors on your phone's screen look more natural — will stop working entirely.

That's all because of a practice known as "parts pairing," which effectively locks components like batteries, screens, cameras and more to the iPhone they came in. If the digital identifier tied to a replacement part doesn't match the one the phone expects to see, you'll start seeing those warnings and issues.

"Only Apple pairs parts in an intrusive way where you get these messages pop up," said Jonathan Strange, owner of two XiRepair gadget repair shops in Montgomery, Ala.

To ward off those unnerving messages and restore full functionality, repair technicians are required to go through a "system configuration" process that authenticates the part after making the fix. Some small operations, like Strange's XiRepair shops, can do that in-store because they've gone through a process to become a certified Apple Independent Repair Providers.

But that process can't happen at all in shops that haven't gone through that certification, or if more affordable parts like third-party replacements were used.

"Every small, independent repair shop has felt the pinch from Apple doing this," said Chad Johansen, founder of a New Hampshire chain of electronics repair stores that employs 12 people. "One, from people questioning the legitimacy of us doing the repairs. And two, people then after saying to their friends, 'Oh, I have this message that the parts didn't work,' or 'Apple told me they [messed up] my phone."

Apple declined to comment on the record about why parts have to be authenticated before an iPhone regains full functionality, but it notes on one of its support pages that repairs "performed by untrained individuals using nongenuine parts might affect the safety and functionality of the device."

Even so, independent repair shops working with aftermarket parts remain popular options for people in need of a fix. It's not hard to see why, either.

For one, they can be easier on your wallet. Let's say you broke your iPhone 11's screen — a very common sight at Strange's XiRepair shops. He said a high-quality replacement

## from a third-party vendor would cost him about \$20 — far less than the \$151 Strange would pay for a genuine display, even after sending the broken one back for a credit.

They can be faster too — a local repair shop probably isn't dealing with as many service requests as a Genius Bar or a Geek Squad counter. Shakeel Taiyab, a independent phone repair tech in South San Francisco, likes to crack open people's phones and get to work right in front of them.

"I don't do the whole 'come back in one hour nonsense'," he said of some jobs. "You come, you sit down, we'll talk, and we'll be done in ten minutes."

More and more, though, repair shop owners and parts vendors have had to find ways to reassure their customers they haven't made a mistake by choosing an independent fix.

Johansen, for example, walks his customers through the unsettling messages they should expect to see, and offers a warranty on the aftermarket parts he uses that lasts for "the life of the device." MobileSentrix, a popular supplier of replacement smartphone parts, also offers a lifetime warranty that covers manufacturing defects on the parts — excluding batteries — some repair shops stock up on.

Parts used in official Apple repairs, meanwhile, have a warranty of just 90 days.

Despite this lingering repair limitation, Apple has slowly come to embrace a growing repair movement. Newer devices, like the iPhone 14, have been redesigned to make replacing its screen and rear glass — historically, one of the most expensive bits to swap out — much simpler. A "self-service" repair option launched in April 2022 also offers consumers the option of renting tools and buying official parts to perform certain fixes themselves. It's a cumbersome process that Apple recommends most people avoid, but it exists.

More recently, the company supported California's right-to-repair legislation by way of a letter to lawmakers, and on Tuesday announced its support for a national right-to-repair law that Apple vice president Brian Nauman said should balance "repairability with product integrity, usability, and physical safety."

But that still doesn't assuage concerns that, where repairs are concerned, Apple exercises too much control over the products we bought.

"What, are you paying to rent the device? Or are you paying to own it," Taiyab asked. "If you're paying to own it, then it's yours. That's your property, and you should be able to do as you please."

"The fact that companies want to use technology to essentially undo the notion of interchangeable parts is something we ought to find deeply disturbing," Perzanowski said.

Others, like Strange, have contemplated more systemic fixes. He appreciates Apple's changing stance on repair but thinks the company should do even more, like changing its iOS software to "recognize and have verbiage" for third-party or harvested parts

inside repaired iPhones. Apple doesn't need to endorse the quality of those parts — Strange just wants the company to acknowledge that alternatives exist.

"They're failing to even tell consumers that aftermarket is a viable option," he said.

## Original article:

- https://www.washingtonpost.com/technology/2023/10/25/apple-iphone-repair-parts-battery-screen/