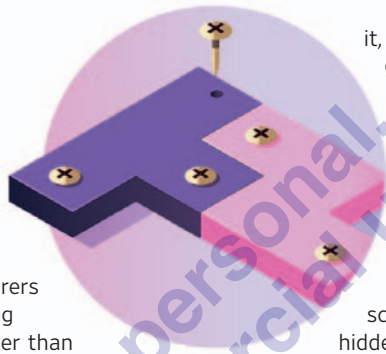


USE STANDARD FASTENERS

So, parts should be removable. But designers also need to consider how they're removed: Choose robust connectors and easy-to-remove fasteners.

Some makers and tinkerers have been saying for a long time that "screws are better than glues." Nothing makes our teardown team groan more than strong adhesives that break our tools, leave sticky residues and require painstaking reapplication. Sure, glue might make a device two millimeters thinner, but in several flagship smartphone brands, new devices are already thicker than the previous ones, meaning that "thinner every model" is no longer the selling point it once was. Rubber gaskets and hydrophobic mesh are preferable for ensuring water resistance. There are modest gains to glass durability when there's a layer of soft adhesive behind



it, but there are ways to make glass more durable that don't make repairs more difficult, such as changing internal weight distribution and the size of the bezel, which is the ring that holds the phone glass in place.

The best designs tell you how to get inside, with visible screws or clips—not fasteners hidden behind trim pieces or stickers. Clips aren't a panacea. They have to be strong enough to hold up to repeated disassembly. Screws are usually reliable, as long as they don't strip. But they should have standard heads. We advocate for Phillips heads because most people have a few Phillips screwdrivers lying around.

If you've got screws of the same drive type and differing lengths, it's a good idea to use a different color or width of head for each length. That can keep repairers from accidentally driving a long screw into a short hole and damaging the stuff inside.