



CRACK OPEN AN iPAQ

Replacing your PDA's battery requires the proper knowledge, adequate courage, and a set of Torx screwdrivers. By Dale Dougherty

While I was getting a new home theater installed, the installer asked if I used a Pocket PC. He said I could make it function as an additional remote control. I had an early model iPAQ, but stopped using it for a number of reasons and it was confined to a closet. The iPAQ is a slim, beautiful device and one of the first color PDAs. I used it as an MP3 player for music and audio books. I also bought TravRoute CoPilot, a GPS navigation system for the Pocket PC that never quite worked for me.

I recalled that my iPAQ's battery no longer held a charge. Batteries are a headache. My Sony

digital camera, which is less than a year old, has a rechargeable battery that has started to fail; the time remaining on the battery went from 30 minutes to zero in practically no time! At least I can buy a new battery and easily swap out the old one. No tools required.

Not so with an iPAQ (or an iPod, for that matter.) The design pre-supposes you will eventually replace the entire device, not just its battery. In other words, you'll upgrade for new features before you

You have to crack open the iPAQ to remove the battery, which is glued to the cover.

Torque on the Cheap: Eklind 7-Piece Torx Fold-Up Key Set from J&L Industrial Supply, about \$10.



A lot of consumer electronics devices use Torx screws, so it's smart to have a set of Torx drivers in your toolbox.

The first step, removing the screws from the iPAQ, is also the easiest. The next steps require a degree of delicacy to complete.

wear it out. But my iPAQ was sitting in a closet in hopes that some day I would find a specialized use for it that would make me retrieve it from the discard pile.

I used Google to see if I could learn how to replace the battery myself. Now, I must confess that I'm not particularly handy nor do I have an innate curiosity about the internals of a device. In fact, as I looked into the problem, I discovered I was missing a basic tool that would allow me to open an iPAQ: a Torx screwdriver.

Finding the Battery and a Torx Screwdriver

Torx screws are star-shaped and come in numerous sizes. I needed a set of Torx screwdrivers rather than a single one because I had to match the specific size, much as you would with an Allen wrench. The iPAQ uses T6 screws. I noticed a few weeks earlier that my Titanium PowerBook was put together with Torx screws (they were slightly larger T8s). A newer aluminum PowerBook uses T6 screws. Also, if you plan to hack into a TiVo box, you'll encounter T10 and T15 screws.

I found a fold-up Torx key set on Amazon for about \$10. It had seven different sizes (T6, T7, T8, T10, T11, T12, T14). I could have bought individual screwdrivers and paid a little more or a little less. I chose the key set, which folds up like a Swiss Army knife, because I thought it might be easier to locate in a drawer instead of several really small Torx screwdrivers.

Using Google, I found instructions for replacing the battery at PDAParts.com, which also sold the battery. The replacement battery cost \$65 and it arrived in the mail within several days. I then set out to remove the back cover from the iPAQ.

Opening the iPAQ

Once I removed the four T6 screws, the back cover remained tightly in place. Removing it felt a bit like I was cracking open a crab shell. I poked at a seam with a knife and got it open just slightly. Cracking it all the way open required more effort and I wasn't sure if I was damaging the insides, especially since there was a cracking sound. Soon, though, I had two halves of an iPAQ. The battery is actually glued to the back inside cover of the case.