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## Lightsaber? Forget it!

**Anyone who runs to the cinemas on December 14 to watch the premiere of Star Wars 8 may have a Darth Vader or Chewbacca mask on their heads. Or maybe a Stormtrooper costume. What he or she will definitely not have is a lightsaber that really works. Why is that? We thought about it.**

You think of Star Wars, you picture lightsabers. George Lucas' space saga and the legendary weapon are inextricably linked, with the high-energy blade featuring in countless battles and duels between Jedi knights and the Sith, between the forces of good and evil. Pure science fiction, right? Pretty much. But what if... Let's say we wanted to make one of these lightsabers. There'd certainly be a fair few challenges to overcome first!

Three reasons why there is no lasersaber:

### 1. A Powerplant in your hand?

One of the less tricky aspects is the question of power supply. How much power does a lightsaber require, and, more importantly, where would it come from? Let's work on the assumption that we need to generate one kilowatt of laser power. This requires a powerful battery, which we could incorporate into the grip. A cell phone battery would certainly fit the bill in terms of size and shape – but with an average output of 1,500 mAh, this idea is not nearly powerful enough. What other options are there? A car battery, perhaps? If we decide to worry about ergonomics later, then 40 ampere-hours and a highly efficient diode laser might be enough to generate a laser beam...for a few seconds. Well – at least it's a start!



Obi-Wan Kenobi Lightsaber (Picture: Gernot Walter)



