

Mul-T-Lock Overlift Tool

I've read about a tool that exploits a design weakness in certain types of Mul-T-Lock (Not all are susceptible to this attack). MTL's main advanced security feature is to have a pin inside of another pin. So in effect a 5 pin lock would actually have 10 pins, the inner pin will set at a different height as the outer pin. This makes picking these locks manually a real challenge. There are tools available for manual picking of MTL's but Eric Michaud has come up with a trick that exploits a design flaw in the lock. Essentially, if the inner pin is lifted to beyond a certain height it will not only lift the inner-
upper above the shear line but it will also lift the upper-outer pin above the shear line as well. A tool for doing this along with a better description of the exploit is described on Matt Blaze's Mul-T-Lock page. I've attempted to recreate this tool. This first design is flawed and does not work but it is a start. Several specifications of the tool will require modification. Anyway here is what I have so far. Here the wires still need to be soldered and cut down to an appropriate height.

You can see the spacing of the wires is aligned to the spacing of the MTL pins. You can also see the wires have been soldered in place. Lastly I've ground the excessive solder and copper off to make it fit better inside the MTL keyway.

The tool is partially inserted here. To get the tool fully inserted something must be put in that holds all the pins out of the way, a modified hacksaw blade was used for this purpose (Not in photo). Flaws with this first designThe copper wires bend too easily and just don't work well for this application. Also I suspect the wires are too thick to easily enter the outer pin cavity. Lastly the 4-40 wire (clothes hanger) is too thick when combined with the copper wires twisted around it to enter the MTL keyway very easily. While I could insert this tool I could not turn it. I could have ground off more of the solder and wire but I feel this would have weakened the wires too far to allow it to still function. In the next version I will grind the 4-40 wire down to a smaller diameter where the 'comb wires' attach. I have smaller gauge copper wire I can use but I don't think they will be strong enough. I'm going to investigate some very thin steel wire, possibly from a wire wheel or other source. If someone reading this has a good source for wire like this please let me know.